



College AND UNIVERSITY Business

JULY 1951: Professionalized Athletics ★ Endowment Earnings and Trends ★ Eliminating Abuses in G. I. Education ★ Utilizing Student Statistics ★ Small College Maintenance Program ★ New Dining Hall



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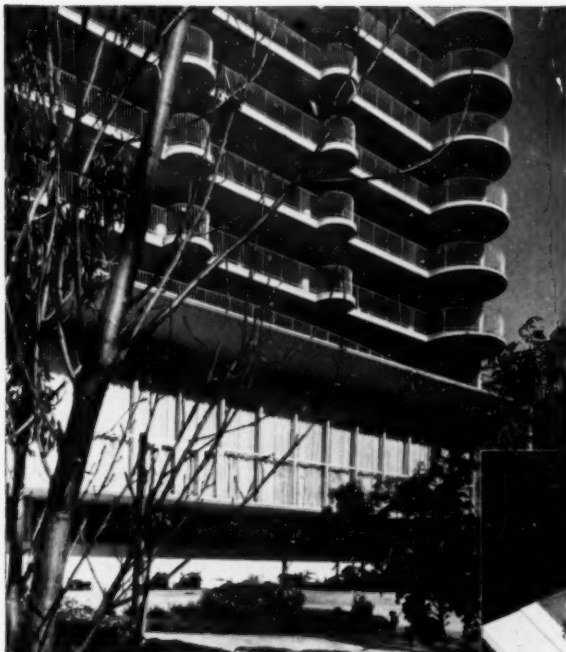
For example, the great majority of children show marked improvement when moved from stuffy, overheated surroundings to classrooms in which level temperatures, adequate fresh air and proper humidity are constantly provided.

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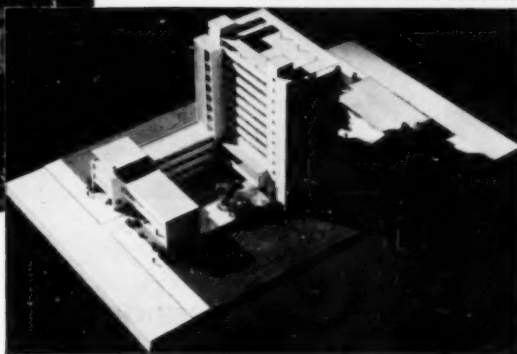
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Photos: DEAN STONE and HUGO STECCATI



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ONE YEAR OLD AND ALREADY FAMOUS

MAIMONIDES HEALTH CENTER FOR THE CHRONIC SICK, which recently celebrated the first anniversary of its opening, has already earned the prediction that it may serve as a pattern for the development of similar facilities in many other communities. For a building which has been

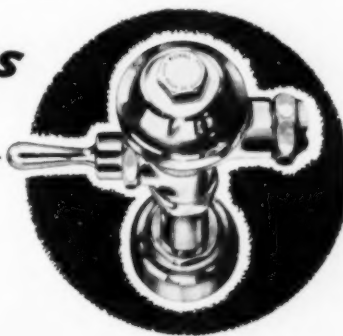
acclaimed as a pacesetter, it is significant that it is completely equipped with flush valves bearing the name that identifies unapproached leadership won and maintained through the years by superior efficiency and economy—SLOAN. Here is more evidence of preference that explains why . . .

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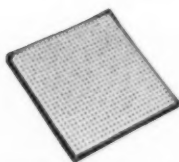


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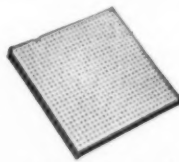
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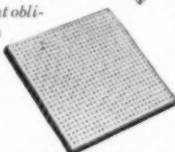
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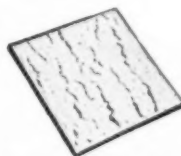
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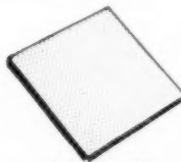
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College AND UNIVERSITY Business



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July 1951

FEATURE ARTICLES

The Chief Danger to Academic Freedom DAVID D. HENRY	17
Professionalized Athletics in Our Colleges Is a Malignant Disease SAMUEL N. STEVENS	19
Endowment Earnings and Trends J. HARVEY CAIN	21
Removing Friction Between Business Office and Faculty G. C. HENRICKSEN	24
Some Suggestions for Eliminating Abuses in G.I. Benefits An Interview with OLIN E. TEAGUE by HAROLD W. HERMAN	25
Service Is Faster, Operating Costs Lower in This New Bookstore HAROLD D. SMITH	27
Study Court Is a Student Oasis CHARLES A. LEWIS and HILARY R. NEAL	30
Minnesota Provides Training for Farm Youths at School of Agriculture BERNARD J. HEIN	32
Achieve Both Utility and Beauty in Alumnae Hall SAMUEL E. BONEY	35
Rulings on Royalties as Self-Employment Income After Retirement DUNCAN I. McFADDEN	38
Collecting and Analyzing Student Statistics FRANCIS B. MAY	39
How to Establish a Unit Cost Program E. T. JOLLIFFE	41
Keeping the Small College Plant Operating Economically and Efficiently JOHN H. KREINHEDER	43
Dining Hall Addition Solves Acute Problem at Women's College DAPHNE M. SCHAUB	46
Program of College Food Service Institute	48
Basic Facts About U. C. Loyalty Oath Case T. E. BLACKWELL	49

QUESTIONS AND ANSWERS	6
LOOKING FORWARD	18
NEWS OF THE MONTH	52
NAMES IN THE NEWS	62
DIRECTORY OF ASSOCIATIONS	66
WANT ADVERTISEMENTS	67
WHAT'S NEW	69
	3

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Among the Authors



S. N. Stevens

SAMUEL N. STEVENS, president of Grinnell College since 1940, suggests on page 19 what must be done by colleges and universities if they are to avoid commercializing intercollegiate athletics and developing professional athletes as "students." Prior to going to Grinnell he had been dean of the university college at Northwestern University and was a faculty member of that institution for 16 years. He has been active in civic affairs, having served as an adviser to the Chicago Crime Commission, and as chairman of the Chicago Commission on Industrial Relations. During World War II he served as a member of the seventh regional War Labor Board. He now heads the personnel consultation firm of Stevens, Thurow and Associates in Chicago, which is active in work with business and industry in the Chicago area. He recently was appointed by President Truman to be a member of the board of governors of the United States Military Academy at West Point.



G. C. Henricksen

G. C. HENRICKSEN, assistant business manager and controller of Duke University, suggests on page 24 how business office administrators and faculty can reduce friction and misunderstanding in interdepartmental relationships. He was made treasurer of the university a year ago and speaks out of personal experience regarding the steps that must be taken to effectuate cooperation. A member of the Duke University staff since 1936, he has been active in C.P.A. circles in Virginia and North Carolina and has authored an article for the *Virginia Accountant*, a professional publication.



Francis B. May

FRANCIS B. MAY, assistant professor of business statistics and statistician in the office of the president of the University of Texas, outlines on page 39 the procedures followed at his institution in using student statistics for administrative use. During World War II he served as chief of section in an army air force headquarters statistical control office. When queried as to hobbies and special tastes, he reported "guns" and classical music, in that sequence. When asked for a human interest item concerning himself, he stated: "Am now boning up on German for foreign language examination for Ph.D. This is not human, but it is interesting."



E. T. Joliffe

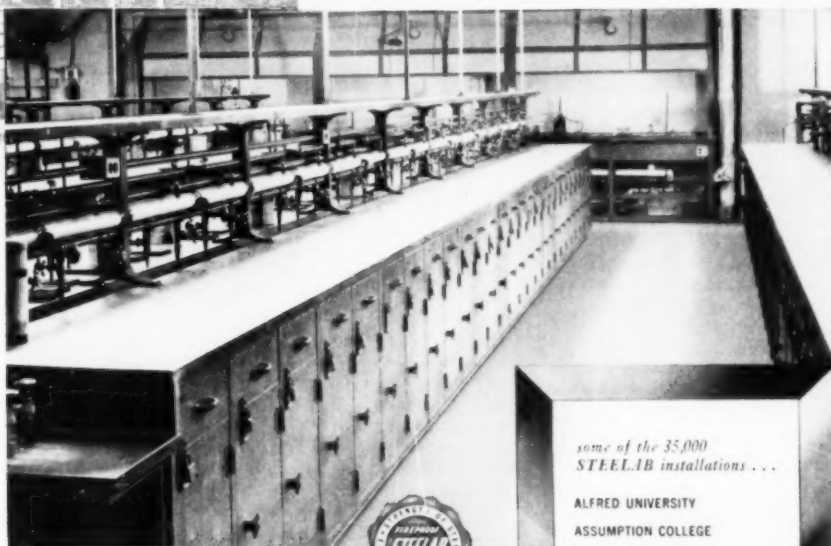
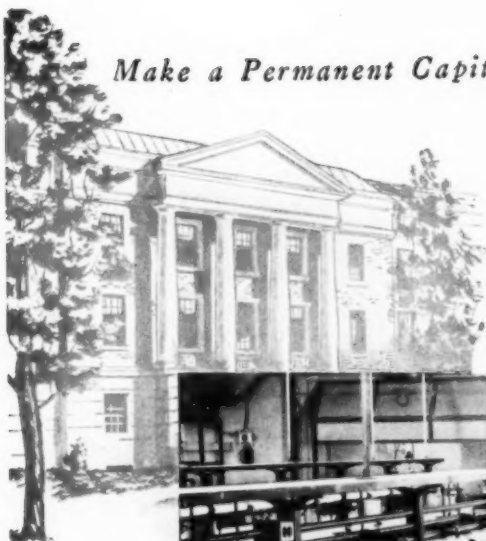
ELWIN T. JOLIFFE, assistant business manager of the State University of Iowa, discusses on page 41 the much debated subject of determining unit costs in an educational institution. He first joined the university staff in 1932 and was named manager of statistical service in 1936. In 1941 he was appointed to his present position. In his lighter moments he enjoys golf and fishing. He also is interested in music and painting and enjoys home life with his wife and two children.

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Questions and Answers

Faculty Cooperation

Question: Has anybody evolved a successful system of obtaining the cooperation of the faculty in reducing operating expenses by shutting windows at night, turning off lights, and locking buildings or rooms when leaving?—H.L.B., Ohio.

ANSWER NO. 1: This matter is a part of the public relations problem confronting the business officer and his staff. There is no sure-fire system, but the first requisite is the good will of the faculty toward the business office. The business officer must understand that faculty members do not consider themselves custodians and never can be made to do custodial work. We have tried putting decal signs over the light switches and on the exit doors to rooms to remind the academic staff to turn off lights and to shut windows. This procedure has helped to some extent. A faculty member will lock his office if requested to do so, but I doubt whether he can be depended upon to lock his classroom. That is the job of the custodian.

I cannot stress too strongly the careful cultivation of amiable, sympathetic and cooperative relations between the business officer and the faculty. Where that has been achieved, almost anything is possible.—GERARD BANKS, business manager, College of Puget Sound.

ANSWER NO. 2: Periodic economy programs announced at faculty meetings and circularized to heads of departments are helpful but not completely successful. Frequent violators are reported by the night watchman to the academic dean or department head for further prompting. The process must be continuous with good promotion given at the beginning of the academic year. Printed reminders on light switches are helpful. When severe weather is forecast, department heads are warned by the maintenance department about shutting windows, and watchman follow-up is scheduled.—OTTO KOHLER, director of buildings and grounds, Mount Holyoke College.

ANSWER NO. 3: I have noticed that when reminded by either the office secretary or the janitor of the building to close the windows and turn off the lights at night faculty members and

administrative personnel have shown a desire to cooperate. Therefore, I suggest that we put the responsibility for these functions on the janitors and the office secretaries. Possibly the final answer is night janitor service. At Lawrence we have a combination of night janitor service and student service. One or two students, living in the main buildings, check the doors, windows and lights each night.—HARLAN S. KIRK, business manager, Lawrence College.

Nonendowed Scholarships

Question: What is the recommended accounting procedure for handling nonendowed scholarships?—W.B.C., N.Y.

ANSWER: All expenditures for scholarships should be reported under the third major category of Current Expenditures recommended by the National Committee on Standard Reports, namely, Other Noneducational Expense: (1) scholarships, fellowships and other student aid. This recommendation applies regardless of the source of funds from which scholarship grants are made.

On pages 39 and 40 of the national committee report, an alternative plan was suggested whereby tuition scholarships and other forms of student aid granted out of general current income might be shown as deductions from gross fees assessed, but most institutions report income from student tuition and fees in the gross, and report expense for scholarships as specified here.—GEORGE E. VAN DYKE, assistant controller, George Washington University.

If you have a question on business or departmental administration that you would like to have answered, send your query to COLLEGE and UNIVERSITY BUSINESS, 919 North Michigan Avenue, Chicago 11, Ill. Questions will be forwarded to leaders in appropriate college and university fields for authoritative replies. Answers will be published in forthcoming issues. No answers will be handled through correspondence.

Better Business Bureaus

Question: How can colleges utilize better business bureaus to best advantage?—L.T.S., Pa.

ANSWER: Our institution has made it a point of attending the annual luncheons of the Better Business Bureau. We visit the bureau's office frequently in order to learn of any new pamphlets that would be of interest to our purchasing activities or general management activities. The Better Business Bureau publishes an interesting series of booklets known as "Facts," from which we have obtained much helpful information.

The bureau also maintains a helpful poster service for industries and institutions that maintain an employee relations program. These posters, which are placed on bulletin boards near where our wage workers gather for meals or rest periods, convey each month a new message about some fraud or stock selling scheme or other method of defrauding the people of their money. We believe this service alone is of real value to our wage workers. We call the bureau frequently to inquire if it has any complaints on file as to the quality of merchandise and service of a particular company; as a result, we have on several occasions avoided dealing with firms whose ethics and business practices are not in consonance with ours. The bureau also publishes a monthly bulletin that is sent free to those schools and colleges that ask to be placed on the mailing list. Recently in St. Louis a splendid program of consumer education was sponsored by the bureau.

My first recommendation would be for a college business official to have his name placed on the mailing list of the nearest office of the Better Business Bureau. He may wish to attend the annual luncheon, and he can make use of the tremendous backlog of information about the companies doing business in his area and even on a nationwide scale so that he can avoid the pitfalls that come occasionally to those who do not utilize every opportunity for acquiring information that is open to them.—CLAUDE L. HOUGH Jr., purchasing agent, Principia College.

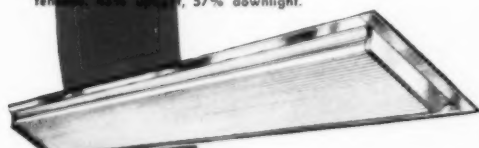
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WYTECEREN idea for factory lighting: white inside and out. Results: lessens shadows — no ceiling gloom.



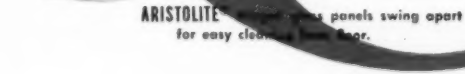
GUTHZON* pull-down for easy maintenance. 43% uplight, 57% downlight.



LITE-BANK* dropper comprehensive line — ribbon of light — never constructed.



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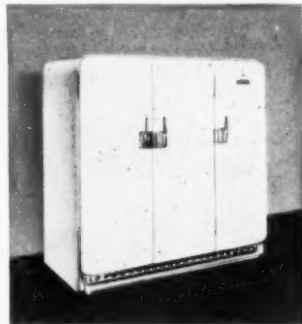
SMU Football player boosts his energy with refreshing ice cream from the Frigidaire ice cream cabinet in the University Athletic Hall Kitchen. There's a 35-gallon capacity, 8-lid Frigidaire cabinet for frozen storage in the Virginia Hall Kitchen.



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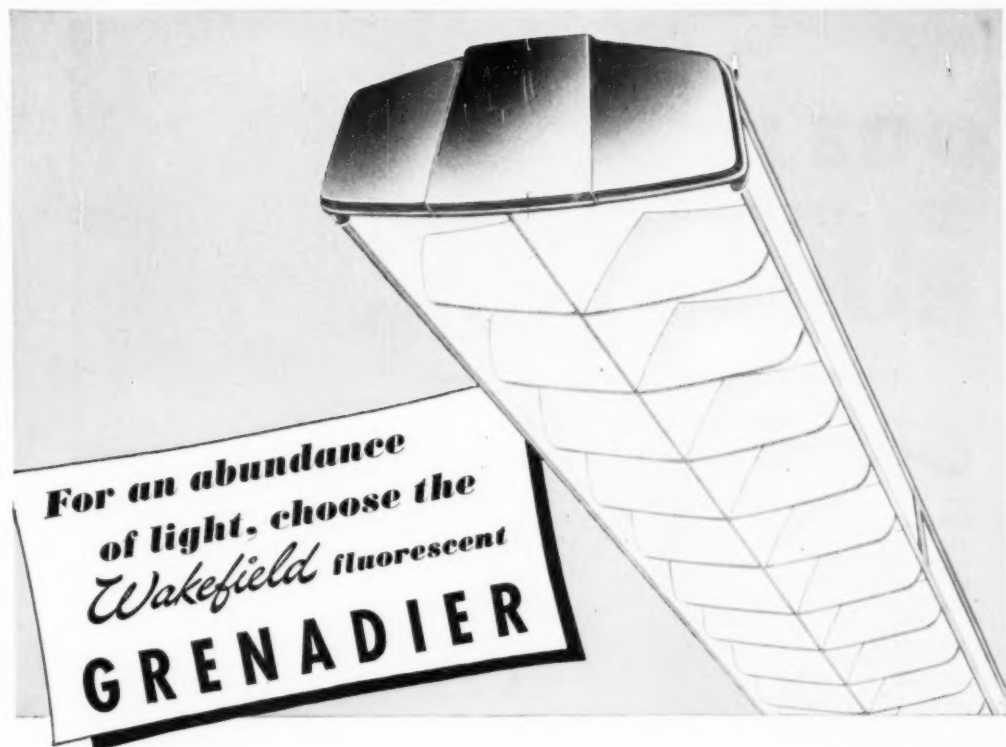
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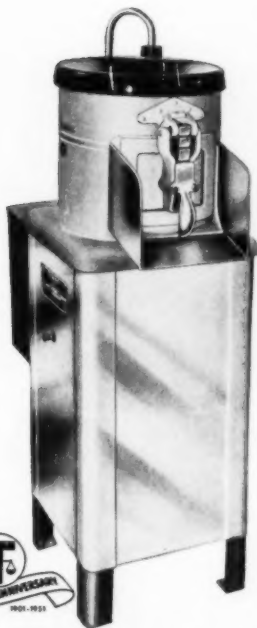
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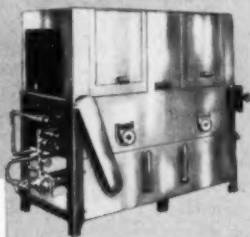
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BASICALLY, ACADEMIC FREEDOM DERIVES FROM public acceptance of its importance. Our people believe in intellectual freedom. In education, this has come to mean freedom of learning, of teaching, and of inquiry, limited only by the assumptions that teachers will be morally responsible, intellectually honest, scholarly in method, and loyal to country.

At the same time, the public as a whole believes in the political immunity of its educational institutions. It accepts the citizen rights of the individual student and the individual faculty member but expects students and faculty members to recognize that a public institution belongs to all the people and that they should not use their privileged position to involve the institution in social action as defined by any segment of the public.

The public, of course, will accept those political consequences that arise from the university's normal functions. There may be political consequences in training people to use the tools of scholarship or in the transmission of knowledge, but these effects are incidental to the special task given to the institution.

The defense line of academic freedom will not be breached as long as the public believes in its validity and it is used with integrity. The chief danger to academic freedom is in those instances in which members of the profession may be justifiably criticized for violating the teacher's obligation as expressed in his own code, and the profession's disregarding those violations.

The teaching profession has recognized the validity of the argument for the political immunity of educational institutions. The American Association of University Professors' statement contains the following reference to the teacher as a citizen:

"The college or university teacher is a citizen, a member of a learned profession, and an officer of an educational institution. When he speaks or writes as a citizen, he should be free from institutional censorship or discipline, but his special position in the community imposes special obligations. As a man of learning and an educational officer, he should remem-

ber that the public may judge his profession and his institution by his utterances. Hence he should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others, and should make every effort to indicate that he is not an institutional spokesman."

Admitting this general premise, it is unfortunate that there is no machinery established by the profession for the enforcement of the code as it deals with the teacher as a citizen. We cannot afford to be unconcerned about those members of the profession who are careless in their observance of the professional code, for their actions give rise to a public questioning of the wisdom of a condition that permits violation of the political immunity of the institution. Just as the use of the classroom as a platform for the political ideas of the teacher cannot be tolerated, so the teacher's use of his institutional identity as a means of giving force to his partisan associations cannot be ignored.

If we expect the public to resist those pressures that would classify together the identified subversive and others who honestly hold minority points of view, to resist unfair textbook inquiries and indictments by headlines, to halt the rumor-mongering on unsubstantiated charges promoted by certain private organizations, we must be able to give assurance that academic freedom does not give protection to those who abuse their privileged position.

It is time that the profession creates machinery to deal with the professional behavior of its members in this area just as promptly and vigorously, and on its own initiative, as it is now prepared to defend them.

A public university is an agency created by society for its conservation and improvement. The means given to it for that end is the education of the individual and the discovery of new knowledge. It has no other function in altering society's course. Partisan labels should have no acceptance in or appropriate application to a truly educational institution. It cannot be "liberal" or "conservative" or "partisan" in any other sense and harmonize its program with the imperatives of its educational mission.

Looking Forward

Our Fifth Birthday

FIVE YEARS AGO THE VETERANS OF WORLD WAR II were descending on the American college campus like a tidal wave. Housing became the No. 1 problem, and much of the "business as usual" attitude of college administrators went out the window. New techniques were evolved to meet new problems.

Five years ago this month Vol. 1, No. 1 of COLLEGE AND UNIVERSITY BUSINESS appeared on the desks of college administrators for the first time. The staff and the management of the magazine have considered it a privilege and responsibility to work toward the development of a publication that really would serve its readers. Sensing the urgency of the times, the magazine searched for material and data that might provide assistance to overworked administrators. Surveys of operating practice were conducted and reported to readers, and every effort was made to anticipate their coming needs.

Though a young voice, early in its career COLLEGE AND UNIVERSITY BUSINESS made a plea for a more effective integration of the regional business officer associations and was gratified to note a step in that direction during the last year with the establishment of the National Federation of College and University Business Officer Associations. The lack of proper professional training for college administrative personnel also has been an editorial concern of the magazine since its inception and will continue to be so in the years ahead.

The immediate postwar years were times for concern about techniques and procedures. Through COLLEGE AND UNIVERSITY BUSINESS, competent authors have shared experiences and suggested solutions to pressing problems.

The years ahead call for continued attention to detail and mechanics, but, more than that, they call for a philosophy of higher education and its proper administration. The philosophy, the purpose, and the content of higher education must be continually examined and carefully analyzed. Colleges must be pioneers as well as conservators of knowledge and learning. They cannot look with indifference on shoddy athletic policy or on the perpetuation of discrimination or segregation in enrollment policies if they hope to be of maximum usefulness to society. Nor can colleges look to a solution of their fiscal problems by jumping into the federal pork barrel. It has been disturbing to note that the interest of some college administrators in achieving financial security for their institutions is greater than their concern for academic integrity.

Such issues are not the theoretical or idealistic concepts of one individual. They are issues that higher education generally is coming to recognize as threats to its future effectiveness.

Big Business and Colleges

COLLEGE ADMINISTRATORS SHOULD BE ENCOURAGED to note in the June 2 issue of *Collier's* that Alfred P. Sloan Jr., chairman of the board of General Motors Corporation, has added his influential voice to those who have urged that "big business" should help colleges with corporate gifts and grants.

In reviewing the financial problem of colleges, Mr. Sloan states that "there are only a limited number of sources to which higher education can look for the really substantial help it needs. The one that comes first to mind is the federal government. This I believe to be entirely wrong. . . . If our educational institutions accept government financing, then, eventually, they must accept political control whether they like it or not.

"There remain, so far as I can see, two substantial sources of private financial aid. One is the private foundation . . . but the very circumstances which in the future will prevent the accumulation of private fortunes will, in turn, prevent private foundations from becoming a source of expanding revenue for higher education.

"There remains, then, one other source of substantial financial help for our educational institutions: corporate enterprise. . . .

"The question promptly arises: Why, if our educational institutions are likely to lose their freedom through government support, are they not equally likely to lose it through corporate support?"

Mr. Sloan believes that there is a substantial difference between the two. "Government support is centralized and hence may easily become dominating. Corporate support cannot be centralized. Relationships resulting from corporate support of higher education are certain to be distributed among many educational institutions."

Mr. Sloan urges outright gifts or grants that should be liquidated in a short period of time—five or 10 years, rather than a continuation of the existing endowment pattern. He suggests a change in present tax structure and corporation law to permit more flexibility in corporation giving. Noting that corporations spend great sums to provide medical and welfare benefits for their employees, he concludes that "they have just as much responsibility, I believe, to contribute to the common cause of higher education."



Acme Photo

PROFESSIONALIZED ATHLETICS

in our colleges is a malignant disease

THE TRADITION OF INTERCOLLEGIATE athletics in American colleges and universities is a precious one in the minds of students and alumni of these institutions. In spite of some of the black marks that now appear against intercollegiate athletics, the long-time record will show that they have contributed to college spirit, to student morale, and to the development of character, courage and personal power in individual participants.

It is interesting to imagine what might have been the turn of history at the time of the Civil War if there had been healthy exchange between the North and the South through the medium of intercollegiate athletics. It is difficult to imagine how poorly off we might have been from a military point of view in all the wars since the turn of the century had there not been a backlog of spirited men whose courage already had been tested on the playing fields of hundreds of univer-

SAMUEL N. STEVENS

President, Grinnell College
Grinnell, Iowa

sities and colleges throughout this country.

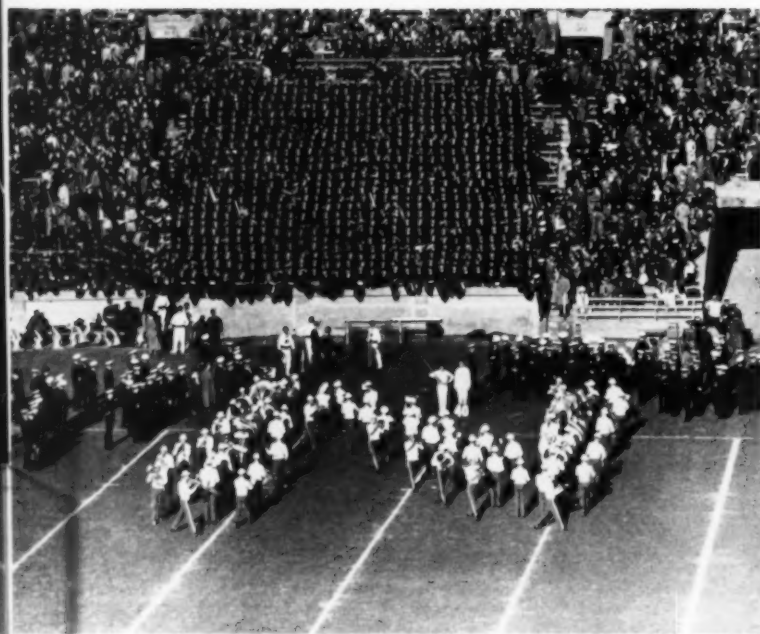
The trouble we are in with intercollegiate athletics today is all home-made. College and university administrators are to blame more than is any other group. Pressed, as they were, for additional finances, they allowed the ambitions of athletic directors and alumni athletic associations to change the character and purpose of intercollegiate athletics.

Originally participation in intercollegiate athletics was for the pleasure of students. It never was intended that money should be made from this activity. It is outside of the academic tradition for intercollegiate athletics to be thought of as a circus or a spectacle for the masses. Individual ambition on the part of coaches and directors, unchecked by the college

presidents, rationalized as "good" for public relations by boards of trustees, built the great stadiums which then had to be paid for. The inevitable chain reaction followed.

Spectacular teams were the only kind that would attract the crowds. Potentially great athletes make spectacular teams; therefore, academic standards must be lowered if necessary to admit the necessary athletic talent into the educational institution. Such individuals rarely have the aptitude or the interest to do high-class college work. Having already been exploited in high school, they are ill-prepared for college. Having been led to attend college in order to participate in intercollegiate athletics, their orientation is not toward academic matters. The next step in academic deterioration inevitably follows.

Because these students cannot perform college and university work of a truly academic character, institutions



Intercollegiate athletics, with its vast crowds and national hysteria, makes it a natural for gamblers, con-men and crooks.

have established majors in physical education or schools of physical education so that individuals can be kept eligible and be allowed to be graduated with a minimum amount of education and a maximum amount of technical material related exclusively to the business of coaching or professional athletics.

The next step in the chain reaction is the progressive loss of control of intercollegiate athletics by faculty committees and by college administrators. The downtown quarterback club, the synthetic alumnus, the state legislature, and the rich though misguided alumnus enter into the picture. Subtly but inevitably the control leaves the university or college and is vested in outside interests. Intercollegiate athletics become not a part of the educational program but an excrescence on it.

The immoral decline of intercollegiate athletics inevitably follows. The vast crowds and the national hysteria make it a natural for gamblers, con-men and other crooks. The college or university may make thousands of dollars; the stadiums may be paid for. Extensive physical education programs may be introduced. Money may be

added to the endowment, new buildings may be built, but something precious has gone forever so long as this chain reaction lasts. The net results are:

1. Intercollegiate athletics belong to the public and not to the college.
2. The control vests in outside agencies and not in faculty committees where it belongs.
3. Young men are exploited as truly as were gladiators of old.
4. What should have been a means to the enrichment of the internal life of the institution has become an end that bends the entire institutional life toward itself.

Efforts at reconstructing intercollegiate athletics that do not recognize the essential root of the difficulty will result only in more institutional dishonesty, more false rationalization on the part of the college officials, and more deterioration in the moral stature of our educational institutions.

This is the condition in which American educational institutions find themselves. The solution of Robert M. Hutchins at the University of Chicago was courageous and under the circumstances the only thing a completely honest administrator could do. It is

not a satisfactory solution because there is a legitimate and desirable place for intercollegiate athletics in college and university life. Return to sanity is quite a simple matter if faculties, boards of trustees, and administrators have the courage to follow a simple program of recovery. This program will involve the acceptance of the basic principles that:

1. *Intercollegiate athletics belong to the students, the faculty, and the internal college community.* Chambers of commerce, synthetic alumni, state legislatures, and even bona fide and well intentioned alumni of the college should have nothing to do with the direction or administration of the intercollegiate athletic program.

2. *Intercollegiate athletics are amateur.* Students with athletic ability should be encouraged to attend universities and colleges on the same basis, and no other, as all other college students.

3. *Control of intercollegiate athletics should rest in the faculty and the college administration.* Athletic directors should be rigidly subject to the control of these persons.

4. *Admission charges to intercollegiate athletics should be eliminated.* The games should be played only on campus property under college control.

5. *Radio broadcasts and television of athletic events should be completely eliminated.*

6. *Courses of questionable academic character and even schools in some universities where the curriculum content is subject to serious academic criticism should be eliminated.* Only those students should be permitted to stay in school who have the ability and motivation really to perform at the college level in "honest to goodness" college work.

7. *Pressure for winning teams as a condition for tenure of athletic coaches should be eliminated by giving the same academic recognition to the members of the physical education and intercollegiate athletic departments as is given to professors of Greek or chemistry.*

If this program is carried through, hardship will result in some instances where colleges and universities have overcommitted themselves financially but within five years 90 per cent of the diseases which now are so malignant in our college and university life, and which have their causes in our misguided intercollegiate program, will be eliminated.

ENDOWMENT EARNINGS AND TRENDS

How 27 institutions invest their endowment funds

THIS ARTICLE BRINGS UP TO DATE statistics on the investment practices of a group of 27 well known colleges and universities and discusses briefly gifts to educational institutions.¹ The purpose of the study is to determine trends in types and kinds of investments that colleges and universities are holding and the rate of return earned on such funds.²

This group of 27 institutions was selected for analysis because they are the ones that hold investments of \$15,000,000 or more each, and that owned total endowment funds of \$1,417,213,521 as of June 30, 1950. These institutions own approximately 65 per cent of the total of all endowment funds reported to the U.S. Office of Education, although they comprise only 2 per cent of the total number of collegiate institutions in the country. During the year ended June 30, 1950, these 27 institutions earned a composite average of 4.29 per cent on their invested funds, compared with 3.97 per cent in 1945. This rate of return was arrived at by dividing the income received during the year by the total of the endowment fund at the close of the year. It was not possible to obtain average balances at the end of each month.

There are approximately 200 institutions in the United States that report endowments totaling \$2,000,000 or more. Their investment policies do not differ greatly from those of the 27 institutions included in this study. The principal variation is that in small institutions located in predominantly farming country investments in mortgages have increased to a greater ex-

J. HARVEY CAIN
Accounting Officer
New York City Board of Higher Education

tent and their holdings of common stocks have been fewer than in the 27 large institutions. Institutions located in large urban centers have invested more funds in real estate.

GOOD MANAGEMENT PAYS OFF

Evidence continues to mount showing that over a long period of years these institutions have managed their funds to the satisfaction of their friends and benefactors and are therefore continuing to receive generous support in the way of additions to these funds. Thus, successful management in college finance is required the same as in industry, where company

growth and alert and capable management produce more and better products, higher wages, and higher dividends.

In the last five years the invested funds of these 27 institutions have increased from \$1,149,595,000 to \$1,417,213,521, or more than 23 per cent. The income has increased during that period by 33 per cent. According to studies made by John Price Jones, "the combined gifts and bequests to 51 colleges and universities between 1940 and 1949 amounted to \$513,980,000, substantially exceeding the \$423,746,000 of all the Thirties and closely approximating the record \$551,321,000 of all the Twenties."

Arnaud C. Marts states that "trends in giving are upward and climbing still higher and under war conditions people give more money than in peacetime. Last year giving to the colleges probably crossed the \$200,000,000 mark compared with \$139,000,000 in the fabulous 1920 decade."

These trends seem to be confirmed by the biennial reports of the U.S. Office of Education and the Department of Commerce survey of current business. Of course, it should be pointed out that most of the gifts have been made to the large institutions. A further fact of new significance is that in those institutions that are publicly controlled, or receive large support from local governments, the rate of increase in endowment funds was double that of the privately controlled institutions. These comparative statistics lose their meaning as to the buying power of the money unless we keep in mind that the Bureau of Labor Statistics Consumers Price Index is now 76 per cent above its 1939 base. The income mentioned has therefore suffered a substantial reduction in purchasing power, even though it has been received in greater measure.

The amount of endowment in total dollars is important to an institution.

Table A—Twenty-Seven Colleges Included in Study

Amherst College
California, University of
California Institute of Technology
Carnegie Institute of Technology
Chicago, University of
Columbia University
Cornell University
Dartmouth College
Harvard University
Johns Hopkins University
Massachusetts Institute of Technology
Michigan, University of
Minnesota, University of
Northwestern University
Oberlin College
Pennsylvania, University of
Princeton University
Rice Institute
Rochester, University of
Stanford University
Texas
Vanderbilt University
Vassar College
Virginia, University of
Washington University (St. Louis)
Wellesley College
Yale University

Note: Approximately two-thirds of the income of the permanent endowment fund of the University of Texas is available to that institution; the remainder goes to Texas A. & M. College. Duke University is omitted from this list because its funds are administered as part of the Duke Endowment. The State College of Washington at Pullman has endowment funds of nearly 16 million, about 10 million of which is in bonds, and nearly 6 million in un sold land.

¹ See Table A.
² Previous studies were made for the Financial Advisory Service, American Council on Education: Bull. 19, June 1941; Bull. 20, July 1942; Bull. 21, September 1944. The Exchange (magazine of the New York Stock Exchange), September 1942; October 1944; June 1945; July 1946. College and University Business, August 1946.

But it is more important to know how many students the income from the funds must support. Among the institutions in this study, four have endowment funds of from \$20,000 to \$27,000 per student; three between \$15,000 and \$20,000; six between \$10,000 and \$15,000; seven between \$5,000 and \$10,000; seven under \$5,000. The average for all is \$6,500 per student.

Because of the large number of students in the publicly controlled universities as compared with the privately controlled ones in this study, the amount of endowment per student in the public institutions averages \$2,250. At the rate of return earned in 1949-50, the average income per student from the endowment funds of all 27 institutions is \$279. Incidentally, the average number of full-time students per full-time teacher was found to be 8.3; the average number of full-time plus part-time students to the total number of full-time and part-time teachers was 8.5.

Table C—Rate of Earnings on Various Types of Investments

	A	B	C	D	E	F	G	H	I	J
Bonds.....	2.30	2.83	2.60	2.1	2.49	2.46	1.97	2.43	2.27	2.94
Preferred Stocks.....	4.02	5.43	6.25	5.1	4.1	3.83	7.4	4.6	4.93	4.95
Common Stocks.....	5.71	7.03	5.64	6.7	5.4	7.71	7.5	7.0	6.95	6.66
Mortgages.....	4.03	4.82	4.7	4.2	5.8	5.08	5.6			2.72
Real Estate.....	5.28	3.99	7.8	5.1	12.8	3.82	2.4		1.07	1.45
Average.....	2.68	4.40	4.8	4.17	4.12	5.00	3.83	5.57	4.2	3.88

Ten of the 27 reports disclosed the rate of earnings on various types of investments. These are shown in above table. Earnings on bonds were from 1.97 to 2.94 per cent. Preferred stocks from 3.83 to 7.4 per cent. Common stocks earned 5.4 to 7.71 per cent. Real estate earnings showed a wide fluctuation.

Income from investments of both public and private institutions is continuing to climb both dollarwise and percentagewise, but in several cases the investment policies are straining close to the limit of prudence and safety. The cost-of-living spiral has made it impossible to provide any cushion in college budgets. In most institutions it is not possible to increase holdings of government and commercial paper, in the hope that a break in the market will permit purchases of stocks at lower prices. The budgetary demands of

the institutions must be met or the institutions will have to curtail services.

Several institutions have had unusually good luck or better breaks or have had much abler investment advice, whatever you wish to call it. They had cash to invest when the market was low and now find their stocks have increased 30 per cent in value, with a rate of return about 1 per cent more than that of their neighbors. Several colleges list securities on which there is now a profit on the principal of more than half a million dollars.

Few college reports give a breakdown of the income received from various classes of securities. The information available is shown in Table C, but it is not sufficiently complete to give a true over-all picture. The rate of return earned by the 27 institutions is shown in Table D.

For more than 10 years now the advantage in yield has been decidedly in favor of common stocks. In 1950 Moody's triple A bond average was 2.62 as compared with 6.80 for 200 common stocks in November 1950. In other words, common stocks, in comparison with high grade bonds, now yield about 150 per cent more income. Most colleges and universities, as these tables indicate, turned to equity investments many years ago, and they have been well rewarded not only by capital appreciation but in a better rate of return.

Financial forecasts over any considerable period have proved most unreliable in the past, even when made by the world's outstanding financiers. Therefore, colleges more and more are seeking protection against all contingencies rather than counting on one or two potential future developments. They have pursued much more forward-looking policies than have insurance companies, savings banks, and other fiduciaries.

The investment practices of colleges and universities have been built upon the theory that securities are purchased

Table B—Composite Investment Fund of 27 American Colleges and Universities

	Amount June 30, 1950	per Cent of Total	Percentage Distribution 5 Years Ago
BONDS:			
U.S. Government.....	\$ 396,281,658.83	27.96	24.58
Municipals.....	24,493,697.49	1.73	2.28
Canadian and Foreign.....	17,227,872.99	1.21	1.43
Utilities.....	96,552,229.56	6.81	7.60
Industrials.....	54,392,409.11	3.84	4.35
Rails.....	58,757,288.08	4.15	5.08
Others.....	15,285,480.71	1.08	0.18
TOTAL BONDS.....	\$ 662,990,636.77	46.78	45.50
PREFERRED STOCKS:			
Utilities.....	\$ 40,776,927.02	2.88	3.66
Industrials.....	62,118,400.91	4.38	4.77
Rails.....	5,042,990.66	0.36	0.47
Others.....	3,256,093.69	0.23	0.17
TOTAL PREFERRED STOCKS.....	\$ 111,194,412.28	7.85	9.07
COMMON STOCKS:			
Utilities.....	\$ 73,381,122.38	5.18	2.78
Industrials.....	249,730,680.13	17.62	16.60
Rails.....	7,820,640.21	0.55	0.95
Insurance.....	20,170,054.25	1.42	1.39
Bank and Other Financial.....	41,983,077.15	2.96	2.95
Others.....	7,123,410.41	0.51	0.48
TOTAL COMMON STOCKS.....	\$ 400,208,984.53	28.24	25.15
MORTGAGES (including real estate bonds and stocks):			
.....	\$ 46,754,898.52	3.30	3.71
REAL ESTATE.....	123,005,623.44	8.68	12.48
INVESTMENTS IN INSTITUTIONAL PROPERTY	15,302,358.93	1.08	1.48
PERSONAL LOANS AND NOTES.....	6,345,898.39	0.45	0.02
ENDOWMENT FUNDS LOANED TO OTHER FUNDS:			
.....	\$ 7,979,729.67	0.56	0.26
(OTHER).....	30,688,760.15	2.16	1.27
UNINVESTED CASH.....	12,742,219.15	0.90	1.06
TOTAL INVESTMENTS (Book Value).....	\$1,417,213,521.83	100.00	100.00

Table D—Rate of Return Earned by 27 Institutions

Number of Institutions	Rate of Income Return
2	Over 6 per cent
3	5.00 to 5.99
6	4.25 to 4.50
8	4.00 to 4.25
3	3.75 to 4.00
2	3.00 to 3.50
3	Under 3 per cent
27	

not to be sold at a profit, but to produce a continuous flow of income at as high a rate of return as possible. On the other hand, great care is used in the selection of sound companies, ones with a good record of management, ones with little or no outstanding debt, ones with good research and other forward-looking programs. The possibility of appreciation is considered, but is not the first consideration.

With the tremendous drop in the purchasing power of the dollar and the greatly increased income taxes, colleges would have been in extreme budgetary difficulties had not these measures been taken. Under a new law that went into effect in New York State July 1, 1950, fiduciary trustees are permitted to invest 35 per cent of their portfolios in investments of the equity type. It may not be long before more savings banks, pension funds, and other types of trustees are purchasing common stocks. Most colleges have been doing so for many years.

Statistics on college investments clearly show that the amount invested in common stocks has been steadily increasing over the years. For a long-range view figures are available going back a quarter of a century, showing the shift in the percentage distribution of investments that has taken place in that time. Table E shows the dis-

Table E—Percentage Distribution of Investments of Eight* Institutions, 1926, 1939 and 1950, Indicating Trends Over a Period of a Quarter Century

	1926	1939	1950
Bonds.....	59.7	49.3	44.7
Preferred stocks.....	9.0	8.6	7.2
Common stocks.....	9.2	24.8	33.7
Mortgages.....	10.1	4.3	2.2
Real estate.....	5.3	9.7	6.8
Institutional plant and loans to other funds...	5.5	1.6	3.3
Other investments and cash.....	1.2	1.7	2.1

*Carnegie Tech, Chicago, Dartmouth, Harvard, M.I.T., Oberlin, Stanford and Vanderbilt.

tribution of investments of eight institutions^a whose holdings now total more than \$500,000,000. The significant facts are that the bond holdings have decreased 15 per cent and common stock holdings have increased 24½ per cent in 25 years.

A study was made by the Axe-Houghton Fund of three methods of investment: (1) high-grade fixed income securities; (2) retirement annuity plan of type provided by leading life insurance companies, and (3) diversified high-grade common stocks. It was assumed that \$100,000 was invested each year for 30 years and that no withdrawals were made. In other words, approximately \$3,000,000 was invested under each method. It was found that at the end of 30 years (1) high-grade income securities had a value of \$4,500,000; (2) the retirement annuity fund amounted to \$4,221,000, and (3) the high-grade stocks had increased to \$10,331,000. The stocks over a long period produced excellent results and might have done better with the careful watching and selection that colleges generally give them.

Under conditions as they are in the world today, purchasers of fixed income securities stand a very good chance of being compelled to accept further erosion of purchasing power.

CITES COLLEGE'S EXPERIENCE

It would not be difficult to pick out specific examples of experiences of colleges that have held common stocks of investment grade over long periods of time with excellent results. One such fund of \$100,000 was invested in November 1933 in 100 shares each of 21 different securities at a cost of \$100,900. The annual income at that time was \$4710. At the close of December 1950 the market value of the fund was \$143,116, and the income for 1950 was \$9555.

Seven of the securities are A or A plus, nine B plus, and five B. Industries represented in original purchases were food 4, oil 3, rail 3, automobile 2, utilities 2, tobacco 2, and electrical equipment, chemicals, mining, sulfur and office machinery, 1 each. Only three changes were made. Two rails and one tobacco stock were sold in 1933, and another chemical, a container and distillery stock added. Most investment experts could have im-

^aCarnegie Tech, Chicago, Dartmouth, Harvard, M.I.T., Oberlin, Stanford, Vanderbilt.

Table F—Percentage of Portfolio Invested in Common Stocks

Number of Institutions	Percentage
1	45 to 50
4	40 to 45
4	35 to 40
7	30 to 35
5	25 to 30
1	20 to 25
1	15 to 20
4	Under 10
27	

proved the results with a few more changes at the appropriate time.

We are constantly hearing dire predictions about the future of American colleges, especially what is going to happen to them if most of the male students are taken for the defense program. All colleges have a large overhead with fixed and continuing obligations. The inflationary forces now at work have a profound effect upon them both as to wages and prices. They cannot change the price as easily to the public for tuition and fees as the merchant can change his prices. Somehow they must compete with industry for the services of key professors or carry them over the next few years when enrollments may be lower, and they must absorb the mounting costs of physical maintenance, to say nothing of the food and fuel bills. To make matters worse, just as checks from the government for G.I. students began to grow smaller, the tax collector began to take away from faithful alumni most of the excess change they had been giving to dear alma mater.

There is no doubt that over the next few years colleges are going to experience extremely difficult problems, but as long as the republic survives, the colleges and universities will continue to keep their doors open. We have faith in the ability of college administrators somehow to find a way to accomplish the impossible. It may mean larger classes on a mass production basis, more hours for professors, more fees from students, or something more drastic, but somehow a way will be found. There are many famous universities throughout the world that have survived for centuries, not one but many governments.

Educational institutions are the most enduring of all human institutions. A few small colleges may have to close temporarily, but the demand for college education will encourage them to open their doors again.

REMOVING FRICTION

between business office and faculty

G. C. HENRICKSEN

Assistant Business Manager and Controller
Duke University, Durham, N.C.

IT IS NOT POSSIBLE TO REMOVE ANY friction existing between the business office and the faculty unless the underlying cause of the friction is known. Before remedial steps can be taken, we must determine whether the conflict is one of personalities or principles.

We recognize, of course, that there is a natural difference of emphasis in relating finance to administration, which might be termed a difference in principle. The faculty and academic administration is primarily concerned with achieving results in education and research, whereas the business office is primarily concerned with how much the institution can afford to spend in achieving such results.

The first group is inclined to insist on efficiency regardless of cost, while the second group contends that a consideration of cost must take precedence. It is natural, therefore, that disagreements between the two groups will arise, but such disagreements need not lead to conflict and friction.

BOUND TO BE DISAGREEMENTS

The conflict, when it does occur, is usually one of personalities rather than principles. I am not qualified to make any suggestions for overcoming personality clashes, but we all know that smooth relationships between the business office and the faculty can never be achieved unless each individual recognizes himself to be a servant of the institution and indicates a willingness to examine all projects in the light of their effect upon the institution.

Too often the faculty looks upon the business office as necessary and useful only so long as it limits its

activities to that of cashier and paymaster, but when it exercises its natural functions of criticism and control, it is regarded as a meddlesome nuisance. On the other hand, there is a tendency on the part of the business office to feel that no one (other than the business office) is interested in economy and to adopt an attitude of distrust. Naturally such attitudes in each group are not conducive to proper collaboration, and friction is created.

The business office personnel can lead the way in removing these conflicts if it will (1) understand its position and function and (2) accept its full responsibilities. The place of the business office in institutional administration is not that of general manager with complete supervision over the heads of other departments. The chief administrative officer of an educational institution is the president (or other designation given this office), and the business office is a



source of advice and information on all matters of finance and accounting.

The responsibilities of the business office may be divided into three groups, namely, financial control, financial information, and financial advice. The

first of these is concerned with safeguarding the collection and disbursement of funds. Of course, there must be machinery to ensure that expenditures are proper and to protect all financial interests, but many business offices seem to think this is their sole function. Too often the business office has control uppermost in its mind and devotes itself to checking and criticizing the activities of the academic personnel. They act as "controllers" in the very narrowest sense of that term, when they should be "comptrollers" in its broadest implications.

The second and third fields of responsibility for the business office—those of information and advice—indicate a sphere of service that will do much to promote the cooperation and good will so desirable in the efficient operation of an institution. This concept is not a new one—it has been preached and taught for some time—but unfortunately its application has not yet become general. If the business office will extend its activities into these fields, it will do much to remove any friction that may arise between it and the faculty. While it is the responsibility of the business office to furnish all departments with information and advice, true harmony will not prevail unless the faculty recognizes its responsibility to study the information and consider the advice. The attitude of the business office should be, "What can I contribute in the way of information and advice?" and the attitude of the faculty should be, "What help can I get?"

The mechanics through which these ideals are achieved is unimportant so long as the principles are understood and accepted by all. It would seem, however, that the best method for attaining results would be by personal consultation between the individuals concerned with specific projects or problems. The initiative for such conferences normally would be from the faculty, but an alert business office will find many opportunities for suggestions in its routine analysis of the records.

We might conclude, therefore, with the thoughts that friction can be removed only if both groups overcome their personality clashes and face their problems with the expectation of achieving efficiency with economy, and that the business office has abundant opportunity for leading the way in this venture in collaboration.



CONGRESSMAN TEAGUE

Some suggestions for

ELIMINATING ABUSES

in G.I. educational benefits

An interview with

OLIN E. TEAGUE

by

HAROLD W. HERMAN

"THE MOST DISTURBING ASPECT of our investigation of the abuses of the G.I. Bill of Rights as it relates to educational benefits has been lack of specific suggestions from college business officers on improvements to be made in writing new legislation. Our committee would appreciate the ideas that college administrators may have on correcting the abuses in the present G.I. bill. College people must concern themselves more vigorously with the responsibilities of citizenship and exhibit more concern and interest in the operations of their government, be it local, state, or federal."

The speaker was a stocky, dark haired Texan with a brilliant war record who is following his own advice. As representative from the Sixth District in Texas, Olin E. Teague is now serving his third term in Congress and is chairman of the House select committee to investigate the educational training and loan guaranty programs under the G.I. bill. The character of a new G.I. bill will be determined in large measure by the investigation and recommendation of the committee under Congressman Teague's leadership. That leadership can have a profound influence on higher education in the years ahead, and COLLEGE AND UNIVERSITY BUSI-

NESS was interested in discovering for its readers what has been done to date.

We were chatting over coffee and doughnuts in the Purdue University Memorial Union prior to the congressman's appearance as speaker at the annual meeting of the Central Association of College and University Business Officers. When queried as to the purpose of the investigation being conducted by this House select committee, the congressman declared that the committee had been formed by House Resolution 93 for the purpose of investigating alleged abuses in the education, training and loan guaranty programs of World War II.

INVESTIGATION 50% COMPLETE

"The investigation was begun in September 1950 and is now about 50 per cent complete," the congressman asserted; "it is being conducted for the purpose of recommending corrective legislation to the Servicemen's Readjustment Act. The study of alleged abuses is being made in order that the shortcomings of the present program may be corrected in the event education and training benefits are extended to veterans of the Korean conflict." Representative Teague was quick to point out that higher education's part in the G.I. bill is only one phase

of the entire education and training program and that the investigation includes a study of all aspects of the veterans' training program, including on-the-job training, apprentice training, institutional on-the-farm training, and below-college schools such as business, vocational, technical and flight schools.

Curious as to what abuses may have been detected by the committee, I pressed the congressman for an answer and promptly and objectively received a summary of the situation.

"Matters that have come to the attention of the committee include: (1) abuses by individual veterans; (2) abuses by schools and colleges; (3) abuses and administrative failure on the part of the Veterans Administration, and (4) abuses and administrative failures on the part of the state approval agencies.

"Typical abuses by individual veterans include lack of purpose of individual veterans, course changing, collusion with school officials to be marked present to gain subsistence payments, enrollment for the purpose of obtaining tool kits, and enrollment in courses that have no occupational value."

The record of some colleges and universities, and also technical institutes

and schools, is pretty sorry, according to Congressman Teague.

"The investigation has disclosed that some schools have billed the Veterans Administration for students who were not in attendance and have billed V.A. for books, tools and supplies that were not issued to the student," he declared. "Other schools have established dummy tool corporations for the purpose of profiting on tools and supplies furnished veteran trainees. Some schools have misrepresented operating costs for the purpose of obtaining a higher tuition rate and have engaged in unethical advertising and solicitation of students."

When it was suggested that the most flagrant abuses of this type may have taken place in schools operated for profit, the congressman partially agreed, but made it clear that some college administrators have been party to very questionable policies.

What about relationships with the Veterans Administration? I reminded Congressman Teague that it had become standard operating practice for college business officers associations to give over a substantial portion of their annual convention programs to problems resulting from misunderstandings or misinterpretations with various V.A. officials or rulings. Has the committee unearthed any data here?

V.A. AT FAULT, TOO

"Yes," Congressman Teague answered; "we have discovered difficulties arising from inadequate, ambiguous and retroactive regulations issued by the Veterans Administration. The cost formulas of the V.A. for the purpose of determining 'fair and reasonable' tuition rates have not been equitably applied in all cases. In some cases the V.A. program has been hampered by the presence of unqualified persons in positions of authority, and there have been instances of V.A. contract officers and officials accepting money, gifts or favors from school operators to the extent that their usefulness to the Veterans Administration has been prejudiced. A number of indictments and convictions have been returned in these cases."

Recalling stories of improper handling of approval and certification of schools by state approval agencies, I wondered out loud how serious a problem this has been. I didn't wait long for an answer.

"Our committee has discovered certain instances in which state approval

agencies have fallen short of their obligation owing either to a shortage of funds or to inadequate organization. One instance has developed in which state approval officials appear to have conspired with owners of schools, creating conditions that are not to the best interests of the veteran trainees and the federal government. Under amendments recently passed, the states are now granted a measure of financial assistance by the federal government to carry out an adequate approval program. This assistance was not available throughout the entire program, and adequate supervision has not been provided for proprietary schools in all cases."

In further discussion of G.I. education, we came to the conclusion that the present setup is excessively complex and in some cases is overgenerous in providing for subsistence as well as for grants toward tuition costs. The congressional committee is exploring several possibilities in the hope that a simplified system of eligibility and aid can be found, Mr. Teague stated. The committee is of the opinion that a system of scholarship aid, without subsistence allotments, may be more desirable and may fail to attract certain veterans who enter the educational program for financial gain.

"You and your committee have done a great deal toward discovering the abuses that have taken place under the provisions of the G.I. bill. What recommendations does the committee have for eliminating abuses of such occurrences?" Mr. Teague was asked.

"It would be impossible to make a comprehensive answer to this question until the investigation is complete. However, at this time it is apparent that activities of the Veterans Administration in the field of tool procurement must be greatly restricted if the interests of the veteran trainee and the federal government are to be protected.

"Steps must be taken to eliminate administrative abuses by personnel of the Veterans Administration and the states.

"A system of appeals to decisions by the V.A. relating to financial matters is needed.

"The law should be amended more clearly to define the obligation of the state approval agencies and should be implemented to prohibit irresponsible use of educational benefits by veterans who seek financial gain through its educational program.

"In the event that veterans of the Korean conflict are given eligibility for educational benefits, a simplified educational aid program should be provided. However, our entire national manpower situation should be considered before this step is taken."

It was now near the hour at which the congressman was to make his speech so the interview ended.

The work of this committee is no frenzied witch hunt, nor is it a white-wash operation. There is evidence that Mr. Teague's nickname of "Tiger," acquired during his student days at Texas A. & M., is no misnomer and that he does not intend to let go of the job he has tackled.

Olin E. Teague, now in his early forties, was born in Woodward, Okla., on April 6, 1910. With a Texan father, it is not too surprising that he entered Texas A. & M. College, was graduated from that institution in 1932, and married a Texas girl, Freddie Dunman of Fort Worth. He was employed in the U.S. Post Office at College Station, Tex., from college days until October 1940, when he resigned his position as South Station superintendent to volunteer for army service as a first lieutenant in the infantry. He was in combat for six continuous months as battalion commander. He was wounded four times, the last time so severely that medics predicted a bleak future for him.

ELECTED TO CONGRESS IN 1946

While in the hospital, he heard that the congressional representative from his district was resigning—and decided to file his candidacy. In his modest fashion, he says, "Before I knew it, I was elected to the 79th Congress." He was discharged from Walter Reed Hospital as a colonel in September 1946 to take his seat in Congress. He has since been reelected to the 80th, 81st, and 82nd Congresses.

The brilliance of his war record is attested by a glance at his military decorations: Silver Star with two clusters; Bronze Star; Purple Heart with two clusters; combat infantryman's badge; army commendation ribbon; French Croix de Guerre with Palm.

He is modest about his honors and retains a sense of humor. "As a Texan," he declared, "we have a pride in our state and also a lively concern for the status of education. When an average Texan moves to another state, we figure the educational level of both states has been improved in the process."

A NEW BOOKSTORE THAT INCORPORATES unusual features has recently been put in operation by the University of Minnesota to serve the Institute of Technology and the schools of medicine, dentistry and nursing. It replaces inadequate facilities that have been used since 1920. Some of the more interesting aspects of this store are as follows:

1. Inclusion of the central corridor of the building as an integral part of the store.
2. Self-service in the book section (some separation between medical and technology sections).
3. An architectural-drawing material department with maximum display facilities and limited self-service.
4. Both maximum display and self-service for the general stationery-school supply department.
5. Various design devices to minimize any pilferage problem.

Each item will be discussed separately.

From the accompanying floor plan it will be seen that there is a central hall running from one end of the building to the other, and there are two stairways, 80 feet apart. The space between stairways to the east of the corridor is given over to a ventilating fan for toilet rooms, entrance to the heating tunnel, electric service panels, water meters, steam mains and valves, and a bookstore stock room for paper and school supplies. No public access to this area is necessary, thus permitting bookstore use of the corridor.

On the other (west) side of the corridor the center portion under the broad front entrance to the floor above was a dark storeroom that was flanked by a classroom on either side. Therefore,

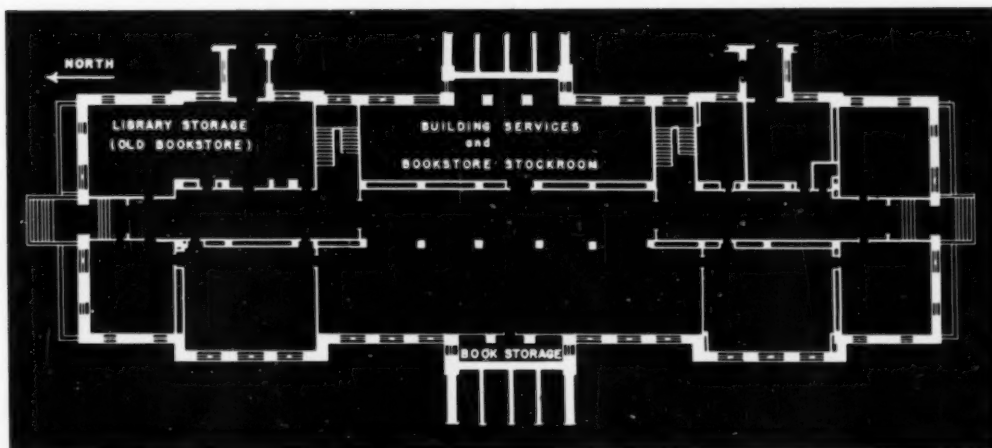


Service is faster, operating costs lower in this

NEW BOOKSTORE

HAROLD D. SMITH

Director
University of Minnesota Bookstores





The stationery-school supply materials are self-service.



Expensive materials are displayed in glass showcases.



A separate section has been provided for medical books.



The book department has interesting shelf arrangement.



A clerk is present at all times in the art department.



T squares, triangles and curves make effective display.

at a cost of these two classrooms (1700 square feet) inclusion of the corridor gave an area of 3500 square feet for the store, and for 80 feet a width of 36 feet, a great aid in working out a good design. Further examination of the plan will show that the store has been divided into three principal sections — books, architectural and drawing materials, and stationery-school supplies — and that the through passageway as a corridor has been retained.

The book department is completely self-service. The shelf arrangement is more interesting than a rectangular layout and has the advantage that during rush periods relatively few clerks stationed in the different sections can maintain general supervision over their sections and at the same time assist anyone who needs help.

Each tier of shelves is numbered, the individual shelves are lettered, and a card catalog shelf list is maintained; however, the books are grouped by department and reference to this file is not frequent. A separate section with a table and chairs was provided for medical books to permit students in medicine and dentistry to examine them. The principal medical publishers send one each of their new books immediately upon publication, and this has become a much used facility.

In the art and drawing material department it is apparent that a clerk must be present to sell expensive items, such as slide rules and drawing sets, as well as to assist in their careful selection, and also to handle drawing paper, particularly that which sells by the yard from rolls. Accordingly, the design provides for a maximum of display and limited self-service. As can be seen in the accompanying photographs of this department, 11 rolls of paper are kept in a small space on a machine that permits a girl to handle them with little effort; the top of the paper storage drawers serves as a measuring table. Slide rules and drawing sets are kept under glass, and small items, such as water colors, brushes and pencils, are in open display. T squares, triangles and curves make an effective wall display, and the method of mounting is both pleasing and flexible.

The stationery-school supply materials are displayed along the east wall for maximum visibility and self-service to the hundreds of students who use the store as a route from class to class. Opposite this wall, two island units and check-out stands enclose the book department. Fountain pens, medical in-



Eleven rolls of drawing paper are kept in a small space on a machine, and the top of the paper storage drawers serves as a measuring table.

struments, and comparable expensive selection materials are displayed in glass showcases in the two islands.

From the foregoing, it is apparent that pilferage possibilities were kept in mind at all times in the determination of the degree of self-service for each department. Positive steps taken to minimize this risk are as follows:

1. In the book department the shelf height is 50 inches. This permits easy observation of the whole department, affords a potential thief no feeling of privacy; too, it gives a pleasing open effect to the store.

2. Both entrances to the book department are equipped with turnstiles. We did not put them in originally but found them to be necessary.

3. During rush periods a detective is stationed in the medical section, where opportunity is at a maximum.

4. Examination of plan or pictures will show that the method of separation of the book department from the rest of the store precludes passing books out to a confederate.

5. At the turnstiles during rush periods a clerk is stationed with a floor model industrial type of stapler. As a student enters, whatever books he already may have are put in a paper bag and stapled shut — a sort of "sealed in transit" arrangement that avoids argument at the check-out and relieves the store of any need for checking facilities and responsibilities.

6. The height of counters for the display of open stock is intended to give a maximum of comfortable visibility to small items and also by reason of this height to require a very obvious motion to pick up an item for transfer to a pocket.

7. In the stationery section two piers jut out at right angles to the wall. They serve to deflect through traffic away from stock (anti-pilferage); draw clerks' attention to potential customers, and protect customers from being buffeted by through traffic.

Careful attention has been given to both light and color. Because of the relatively low ceiling, a 5 foot, 40 watt, exposed tube fixture was adopted; it requires no cover and keeps the lights as high as possible. The white ceiling is acoustically treated. Fixtures are a soft grayed oak, and what little wall surface remains is painted in pleasing greens and yellows.

The results desired all have been achieved. Rush period service is fast, operating costs have been reduced, and in the face of declining enrollment cash business (not G.I.) has increased. It seems pertinent to add that while some of these features may be applicable to other stores, yet our self-service book department does require a fairly large area, and the total number of titles handled is less than a thousand. For a store with several thousand titles, the problem would be more complex.



STUDY COURT *is a student oasis*

in a highly urbanized campus

STUDENTS AT WAYNE UNIVERSITY, Detroit, now have an opportunity to soak in sunshine and fresh air while they study. Utilizing space between two wings of a new building, the university has provided the urbanized campus with an oasis of green grass and trees known as the Study Court.

Wayne long has cherished the hope of providing a touch of secluded outdoor beauty in the campus layout. The crowded campus probably never will provide the same spacious lawns and ivy covered walls of the campuses in small college towns. This the administrators knew, but they felt that even in a metropolis like Detroit, the students should have an opportunity to enjoy at least a little of the relaxing,

quiet atmosphere of an outdoor beauty spot.

Study space was badly needed at Wayne, for such space had lagged behind the other campus facilities in the expansion programs. Overflow enrollments had dictated that priority be given to classrooms and laboratories. To solve these two problems — the need for a touch of nature and the demand for expanded study facilities — the new Study Court was conceived and built. The court has proved its value on both scores and has so well ful-

filled the hopes of its planners that additional study courts are a part of the continuing campus development plan.

When the present court was planned, the problem of noise was held to be important. It was hoped that the two wings of the adjacent building would serve as sound absorbers, and they did. The planners no longer are worried about the successful use of buildings for such protection. A special advantage in the matter of quietude lies in the natural sound absorbing quality of an outdoor space as contrasted to the

CHARLES A. LEWIS and HILARY R. NEAL

Division of Community Relations
Wayne University, Detroit

Ribbons of grass separate masonry slabs, and hedges give an added touch of greenery. Flowers have been planted around grass squares wherever the hedges do not appear.

traditional study hall. Noises generated within the court are no problem, and students engrossed in their books are undisturbed by other students talking freely even a few feet away.

Two factors to be considered in planning a study court are its usability in terms of local weather conditions and its elaborateness, as determined by the money available. Wayne's experience in these two areas is illuminating.

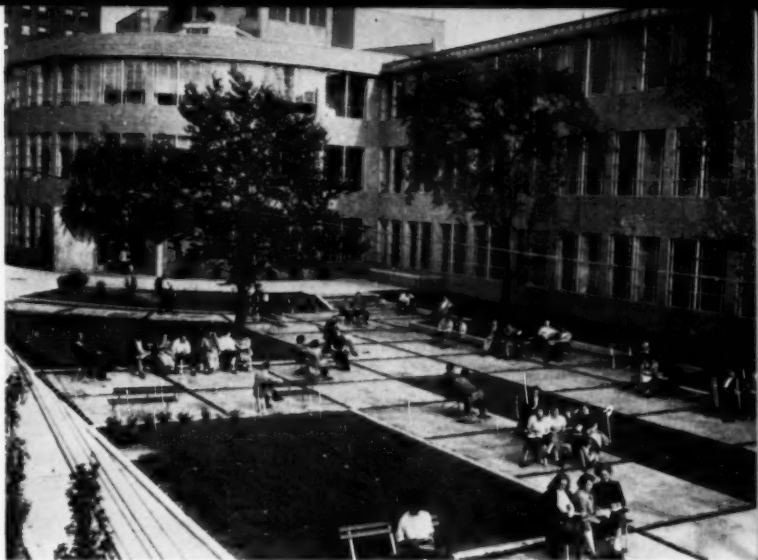
On the first score, Wayne found that Detroit has 221 clear or partly clear days yearly. On each of these (and even on some cloudy days) the court would be usable if temperatures were comfortable. Data are now being obtained on the number of days of actual use, but already Albert C. Lamb, director of the division of buildings and grounds, has encouraging evidence of the court's popularity.

Economy was necessitated by the already strained construction budget, and costs had to be kept below \$10,000. Therefore, wooden benches were used in place of permanent stone ones, and a miscellany of trees already standing in the area were retained, rather than being replaced by new plantings. Through these economies and the elimination of costly pools and fountains, costs were actually held to \$9450.

In the planning, a number of designs were considered. The area could be terraced, flush with the ground, or sunken. Wayne chose the sunken type. Physical work on the project began when bulldozers moved in and scooped out the earth, thus lowering the surface about 7 inches below the level of the surrounding walks. Subterranean tile drains were then laid. These were inclined so that at one end of the court they lay at a depth of 1½ feet and at the other end, at 12 feet. At the deep end they meet the sewer, and as a result the court drains within half an hour, even after a heavy rain.

At ground level, rectangular slabs of

Near the shady circles of trees, workmen lay quarry stone in concrete beds to form 12 foot squares of masonry. In the center of the court is a rare copper-beech tree.



quarry stone were set in cement to form 12 foot squares. These squares, in turn, were placed together to form "decks" of an irregular geometrical pattern. The open spaces within the pattern were provided with generous areas of grass, the total areas of lawn and of masonry being approximately equal. Study benches are located on the stone areas, and no necessity has been found for "Keep Off the Grass" signs. In fact, no prohibitions are planned even against picking flowers when these appear in the summer.

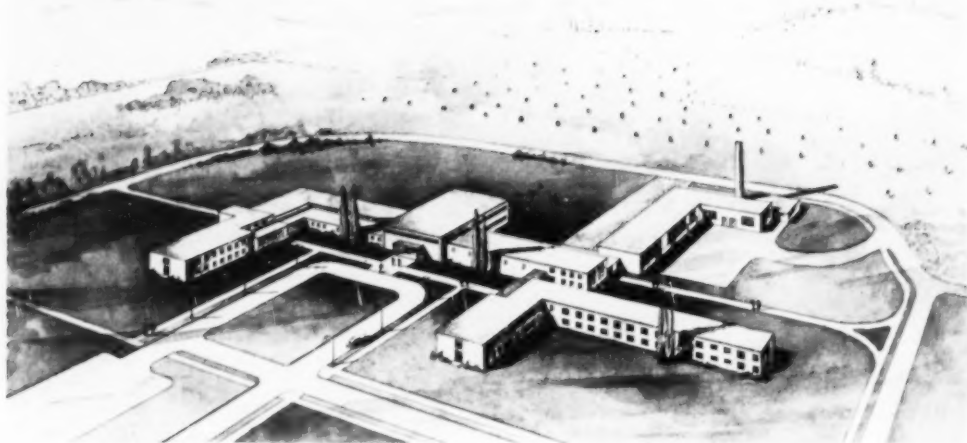
Quarry stone (actually Tennessee limestone) was selected as the basic construction material because it is both inexpensive and attractive. A special minor feature of the grass planting was to grow grass between the 12 foot squares that make up the decks, a 4

inch strip being left for this purpose. Thus, a pleasant green fillet-work design has been evolved.

The architect for the building that flanks the court cooperated with Wayne's building and grounds division in drawing up plans, as did the landscape architect of the Detroit Board of Education. The elapsed time from excavation to final completion was less than six weeks.

Students are putting the court to constant use, occupying nearly every seat on days when the temperature is favorable. Even during the cold season, they frequently used it on days chilly enough for overcoats. It is one of the campus' most popular gathering places, where students study, talk and enjoy nature's feature attractions—sunshine and fresh air.





Minnesota provides training for farm youths at a new

SCHOOL OF AGRICULTURE

THE UNIVERSITY OF MINNESOTA maintains vocational agricultural schools and branch experimental stations at several outlying points in the state of Minnesota, which are administered by the Department of Agriculture. Waseca, a city of about 7000 population, located in southern Minnesota, has been the site of one of the experimental stations for several years and has been chosen as the location of the new South Central School of Agriculture.

The purpose of these schools is to provide training for farm boys and girls of high school age in order to encourage their careers as farmers, and to educate them as such according to the latest methods. In addition to carpentry, motor shop and welding shop work, animal, dairy and poultry husbandry, agronomy, home economics, music and commercial training, related cultural subjects are taught in order to give the students a well rounded preparation for life. A certificate will be awarded to each student on completion of the required credits.

The school year of six months begins October 1 and ends April 1 to dovetail with the farm work season, since the majority of students are from farm

families. Local students may live at home but those from out of town must reside at the school as far as facilities will permit.

Residence halls and dining room are designed to accommodate 50 girls and 150 boys. Owing to cost considerations, the north wing of the boys' dormitory has been eliminated until additional funds are provided. Ultimately the school will accommodate 100 girls and 300 boys; the auditorium, classroom section, and shops have been designed for this number. The finger plan lends itself well to future expansion of most facilities. When completed, the boys' dormitory will form a quadrangle.

A physical education program will be added as a future project, and the gymnasium and athletic field will be situated north of the boys' residence hall. The heating plant is sized to

accommodate all anticipated future expansions.

Six hundred acres of experimental farm land at the southwest city limits of Waseca provide the setting for the building, which is located on slightly rolling terrain. Dormitories, cafeteria, auditorium, library, administration and instructors' offices, health service, classrooms, shops and boiler room are included in the original building. Full basements are provided under dormitories and cafeteria, and crawl spaces under all other portions except shops, for easy inspection and maintenance of mechanical piping. Dormitories and central classroom sections have a second floor. The extreme dimensions are 506 by 555 feet.

A nonfireproofed structural steel frame and steel roof deck have been used for the shop wing. The boiler room and all other sections have a

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Albert Lea, Minn.

reinforced concrete frame. Ribbon beams permit an 8 foot 8 inch floor to floor dimension in dormitories. Flat, one-way concrete slabs have been used generally, although concrete joist and lightweight concrete filler tile were employed for long spans. Concrete roof slabs are flat and have a 12 inch overhang. Parapets were omitted for design purposes and to eliminate the usual flashing problem.

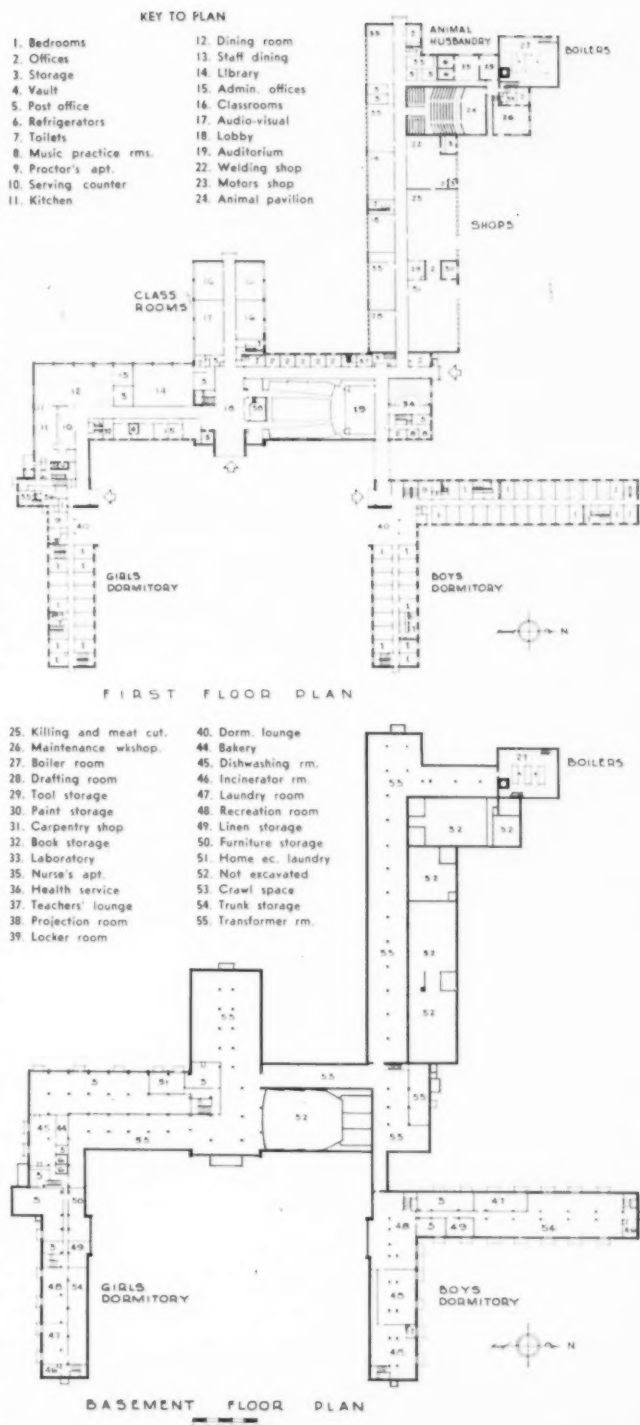
Exterior walls, which below grade are of reinforced concrete and above grade of face brick backed with lightweight concrete block, constitute typical construction. The main entrance façade and porch sidewalls are faced with Minnesota limestone. Face brick for partition walls at dormitory corridors, vestibules and interior surfaces of exterior walls in bedrooms was specified to lower building costs and simplify maintenance.

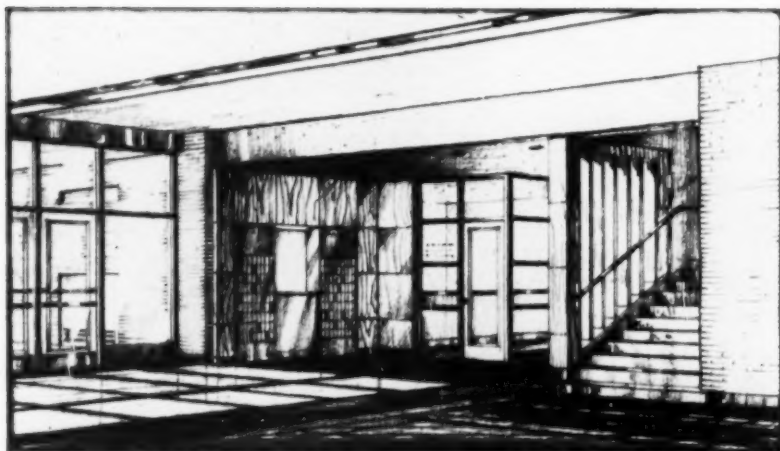
Interior face brick partitions in the lobby and auditorium are being combined with a limited use of natural finished oak paneling. Other partitions are of lightweight concrete tile with a plastered finish in toilets, kitchens, cafeteria, library, stairs and dividing walls of girls' dormitory bedrooms; otherwise these partitions will be exposed and painted.

Commercial projected steel windows for the basement and shop section and wood casements with storm glazing for the dormitories and offices provide a contrast with the multiple glazed awning type of wood windows used in the main kitchen, cafeteria, library and dormitory lounges. The central classroom section has continuous wood casements combined with plate glass picture windows, 3 feet high. Artificial illumination will provide the principal source of light for these classrooms. Doors are wood with the exception of certain required fire doors. Exterior doors of pine and interior flush doors of birch have pressed steel frames.

Minnesota granite for exterior steps and platforms at the principal entrances provide durable and colorful surfaces. Typical interior stairs with abrasive cement treads and pipe handrails were used for economy. The open stair from the main entrance lobby to the second floor is terrazzo with brass trim.

Acoustical tile on wall and ceiling surfaces of the band room and music practice rooms and on ceilings of corridors, library, cafeteria, dining room, visual education classrooms, and busi-





The open stair in the main lobby leads to the second floor, where, in addition to home economics classrooms and commercial classrooms, there are student bedrooms and living quarters for the kitchen employees.

ness offices will provide the proper sound control. The auditorium has received special attention and has scientifically designed wall and ceiling surfaces.

Entrance vestibules, main lobby, and cafeteria kitchen floors are quarry tile, while ceramic tile is being used in toilets. Rubber tile is selected for the library floor; other rooms and corridors have asphalt tile.

The typical concrete ceiling surface is painted. All plaster wall surfaces and the exposed block in principal rooms are painted. Color schemes consist of grays, yellows, gray greens, and reds for walls and white for ceilings. Gray and black predominate in the asphalt tile floors; most doors and frames are to be painted black.

Natural gas with an oil standby will fire the three boilers of the heating plant, and steam heat is supplied to steel finned radiation for most rooms. Vestibules are heated by concealed unit heaters, while the auditorium and animal husbandry pavilion have independent ventilating systems with coils for winter air conditioning. Convectors supplement the auditorium heating system at extreme winter temperatures. Audio-visual classrooms are heated and ventilated with unit ventilators.

Individual room temperatures are automatically controlled, and the entire system has a central manual control. The system is divided into eight zones that can be controlled by valves.

The cafeteria kitchen provides facilities for food storage, preparation and cooking for 400 persons. A bakery also has been provided for in the

basement. Dishwashing will be done in the basement, with a subveyor connection to the main floor where clean dishes and silverware are to be stored.

The boys' dormitory is connected to the main structure by an open but covered passage; otherwise a person may walk from one point to another in the building without going outside. Recreation rooms are located in each dormitory basement, and when the tables in the cafeteria dining room are removed party space is available.

DOUBLE ROOMS FOR STUDENTS

The dormitories will be controlled by proctors who have an apartment on the first floor and by upper class student proctors on the second floor. Student bedrooms are designed for two. A wardrobe, mirror, bookshelf, study table, and bed are standard furnishings for each student.

The student health service is intended for minor treatment and diagnosis only; all confinement will be in the local hospital until other facilities can be added at the school.

Ventilation for toilets, kitchens and laboratories is provided with roof power ventilators.

Classrooms, library, cafeteria and offices have fluorescent lighting, while audio-visual rooms and the auditorium are lighted with incandescent fixtures controlled by dimmer systems. The auditorium lighting consists of ceiling recessed spotlights of sufficient intensity to permit students to take notes during lectures. Residence hall lounges have fluorescent cove lighting; corridors and bedrooms, conventional incandescent fixtures. A fluorescent wall

fixture below the bookshelf lights each study table. Shops are lighted with dome fixtures. Floodlights on the building and standards along the wall will provide the proper exterior illumination as occasions require.

A telephone system connects all sections to the administrative offices and to one another. Conduits are provided for a future call and bell system, omitted because of the cost. Residence halls are equipped with a buzzer in each room, and classroom bells and fire alarms are provided in all corridors. Dumb-waiters serve the main kitchen and home economics kitchen from the storage and preparation space in the basement. Four separate walk-in refrigerators will be installed for milk, meat and other perishables used in the main kitchen. Two refrigerators are required for meat cutting classes.

Kitchen employees will consist of a dietitian and eight to 12 women cooks and helpers. Bedrooms are provided for a part of these employees on the second floor adjoining the girls' dormitory. While most meals will be served cafeteria style, provisions have been made to serve dinners for certain occasions.

The current construction program, excluding furniture and movable equipment, auditorium seating, and stage curtains, totals \$1,342,643. The general contract is \$898,812; plumbing, heating and ventilating, \$311,075; electrical work, \$128,505, and refrigeration, \$4251. The over-all average cubic foot cost is \$0.93, which includes extended footings required by soil conditions. Construction will be completed by next spring.



CEDAR CREST COLLEGE IN ALLENTOWN, Pa., last fall completed an addition to its plant that is a distinct departure from the traditional lines of college and university architecture. It is a modern design many-purpose building, combining housing for three departments of college instruction—art, music and drama—a little theater, headquarters offices and lounge for the alumnae association, a chapel, and an auditorium serving Allentown's 106,000 population.

The new alumnae hall reflects a growing trend designed to emphasize utility in college and university construction. The architects, however, have achieved both utility and beauty in the outlines of Cedar Crest's new building. A total of 375,000 cubic feet of space has been provided, with a maximum devoted to useful purposes and all blended by a rare combination of interior colors.

Cedar Crest's older buildings are characterized by Spanish tile roofing, extensive cornices and millwork. It is estimated that the elimination of these features alone would pay the cost of a modern classroom. Maintenance costs for the new type of structure are proving appreciably lower.

Achieve both utility and beauty in

ALUMNAE HALL

SAMUEL E. BONEY

Director of Development
Cedar Crest College, Allentown, Pa.

Alumnae Hall is a long, low, flat-topped building of fire resistive construction, consisting of structural steel framing, steel joists with reinforced concrete slabs. Exterior walls are of buff brick similar to those in the other campus buildings. The brick is backed up with concrete block. Exterior walls are furred before plastering.

Windows are architectural projected type of aluminum, equipped with anti-draft hopper ventilators at the bottom and projected ventilation at the top.

Floors are of asphalt tile in different color combinations. Doors and trim in prominent locations are birch; in other locations the doors are painted to follow the decorative scheme, mostly soft blues, buff and rose. The roof is a 25 year ply, with aluminum and copper flashings.

The building was planned to take care of the institution's most urgent needs, which were classroom space and an adequate auditorium. For 67 years, Cedar Crest had no hall (except its Curtis dining room) where the entire



Above: Alumnae Hall lounge at Cedar Crest College, Allentown, Pa. The lounge is located just back of the alumnae business offices, which are to the right as you enter the building. Below: Alumnae Hall auditorium. Seating has been provided for 502 in modern opera type seats with room at the rear for 100 movable chairs. Provision has been made for the installation of a pipe organ in the future.



student body could assemble at one time.

In the front-level section of the new building is the buff and blue trimmed auditorium with 502 fixed seats and space for 100 or more movable chairs. A stage, suitable for large or small productions, is provided with all needed accessories, including modern lighting equipment, ceiling-dome, and storage and property space underneath. The stage curtain, costing \$2500, was donated by a member of the alumnae association.

Adjoining the main entrance foyer are the two administrative offices of the alumnae association, with the 20 by 40 foot alumnae lounge to the south and east. It is equipped with modern furnishings with the gayest of upholsterings; lighting is through a unique projection of ceiling fixtures. The west wall is of plywood paneling equipped with special lighting for art exhibits. Almost the entire south wall of the lounge is plate glass.

Leading west from the main foyer, a corridor is bordered by two large classrooms on the south and space for the entire art department on the north. The art department contains an oversized room, a standard room, and a special workroom with sinks for plastics, basket weaving, ceramics and similar activities.

Alumnae Hall is built on a hill with the slope to the rear and south end, thus providing a ground floor below the classrooms and auditorium which comprise a first story to the front. On this ground floor, adjoining the property room and stair leading to the stage, is a dressing room area with small rooms adjacent. These rooms are used as individual music practice rooms as well as for dressing rooms.

A little theater adjoining this area is used for chorus and instrumental music, visual education and English dramatics, as well as for Greek drama rehearsals.

In this area also are five faculty consultation rooms.

Lees Memorial Chapel, in the north-west wing of the building, seats 114 and is furnished with regular church pews in walnut. It is used for medium sized groups in religious education, weddings and general religious services. The chapel windows of tinted glass later will be replaced with stained glass. Wall and ceiling lights are of the latest design. The chapel and its furnishings, including an electric organ,

RULINGS ON ROYALTIES

as self-employment income after retirement

DUNCAN I. McFADDEN

Controller, Stanford University

THE 1950 AMENDMENTS TO THE federal Social Security Act, in addition to increasing materially the Old-Age and Survivors Insurance benefits, brought many millions of people under social security coverage. Among those who are covered for the first time are the self-employed and the employees of nonprofit educational institutions. The latter were exempt from coverage under the old act by reason of the institutions' exemption under Section 101(6) of the Internal Revenue Code.

The 1950 amendments provide that coverage may be extended to employees of nonprofit educational institutions if the institution waives its tax exemption in respect to such coverage and two-thirds of its employees concur in such action. The coverage is then extended to those employees who so concur and to all personnel subsequently employed. A present employee who does not desire coverage may refrain from signing the concurrence list and thus be exempt from coverage as long as he is continuously employed at the institution.

In considering the advantages of Old-Age and Survivors Insurance many of the faculty members of Stanford University were interested in whether royalties received on books or patented inventions constituted self-employment income. There was no concern as to royalties received prior to retirement since the social security tax on self-employment income is effective only in case the salary for the year is less than \$5600.

It was recognized, however, that self-employment income after retirement might jeopardize O.A.S.I. benefits otherwise payable to a retired person. The effect of such income on benefits may best be presented by a quotation from

an opinion rendered by the commissioner of the Federal Security Agency.

"Beginning Jan. 1, 1951, benefits are not payable for one or more months if an individual, while under 75, renders substantial services as a self-employed person . . . in an occupation . . . which is covered by the law, and he has net earnings from self-employment averaging more than \$50 a month for the taxable year. Therefore, whether old-age benefits will be payable to a self-employed individual for one or more months in a year will depend upon the amount of his net earnings from self-employment in that year, and the number of months he renders substantial services in self-employment."

GET COMMISSIONER'S OPINION

Stanford University felt that there was sufficient interest in whether royalties constituted self-employment income to justify requesting an opinion regarding the matter. It was presented to the F.S.A. commissioner by the Washington office of Lybrand, Ross Bros. & Montgomery, auditors of the university, under date of Dec. 20, 1950. The presentation by the auditors was as follows:

"Certain currently employed professors and other members of the teaching staff of the university are authors of books or have made inventions on which they currently receive periodic royalty payments from publishers of the books or the licensees of the inventions. After their retirement from university employment these individuals will continue to be entitled to receive such royalties from books previously written and from inventions previously made. They desire to have assurance that the receipt of royalties from these

sources will not reduce the maximum benefits to which they will be otherwise entitled under Sections 202 and 203 of the Social Security Act. Section 203 apparently contemplates that benefits will not be reduced in any month by reason of the receipt of net earnings from self-employment unless the individual has rendered substantial services in such month. . . . The same section provides that the administrator is to determine whether or not an individual has rendered such substantial services. Inasmuch as the royalties here described will be derived from books written or inventions made prior to retirement, it appears that the receipt of such royalties will not constitute income of the type which will reduce the monthly benefits provided by the act."

The specific question upon which an opinion was requested was "whether the receipt of royalties after retirement from books written or inventions made prior to retirement will constitute net earnings from self-employment requiring the reduction of the maximum monthly benefits otherwise payable under Sections 202 and 203."

The commissioner, A. J. Altmeyer, replied on Dec. 28, 1950, and in answer to this question stated: "Your assumption that persons who receive royalties from their books or inventions after retirement will not have their benefits withheld by virtue of such income, unless they perform substantial services in one or more months of the year, is correct. Thus . . . where royalties are received after retirement, without any further work on the books or inventions, there will be no withholding of benefits."

We also asked for an opinion regarding the effect of revisions or improvements of books or inventions when such revisions or improvements were made after retirement. The presentation by the auditors was as follows:

"A closely related question on which a ruling is also desired concerns the receipt of royalties from books revised or inventions improved by professors and other faculty members after their retirement. It may be that during the months in which the retired individual is actively engaged in the revision of a book or the improvement of an invention he would be rendering substantial services in such months which might reduce his monthly benefits. However, it seems clear that as soon as the revision or improvement is completed such individual would no longer be rendering substantial services in self-employment

and that his maximum monthly benefits would be restored."

A specific ruling was requested on the following examples regarding this phase of the problem.

1. "Whether the royalties received by an individual after retirement from his unrevised book or his unimproved invention during the months in which he is actively engaged in the revision of such book or the improvement of such invention, which revision or improvement will, subsequent to completion, produce royalty payments, will constitute net earnings from self-employment requiring the reduction of maximum monthly benefits otherwise payable under Sections 202 and 203."

2. "Whether the royalties received from the revision or improvement in months subsequent to completion of such revision or improvement, and during months in which no substantial services are rendered, will be deemed to constitute net earnings from self-employment which will reduce the maximum monthly benefits otherwise payable under Sections 202 and 203 of the act."

The F.S.A. commissioner's ruling on Example 1 states: "... where the professors make revisions in their books and improvements in their inventions, such services may cause a withholding of benefits for those months in which they are performed. ... The determination of whether the services engaged in by the individual are 'substantial' within the meaning of the law will have to be made in each case, depending on all the facts."

The commissioner ruled that there would be no withholding of benefits in Example 2 since the conditions paralleled the royalties received from books or inventions prior to retirement, and "since there would be no question of substantial services in either."

Although we did not request a ruling on the effect of royalties received from books written or inventions made after retirement, the commissioner in ruling on Example 1 added "a withholding of benefits may also result if the professor engages in new writing projects or in making new inventions," again referring to the fact that a determination would have to be made in each case as to whether the services engaged in were "substantial." We believe it follows that royalties received *after* the completion of the new writing project, and also after the completion of work on a new invention, therefore will not jeopardize benefits otherwise payable.

Collecting and analyzing

STUDENT STATISTICS

FRANCIS B. MAY

Statistician, University of Texas

THE PROCESS OF COLLECTING DATA as to students, centering as it does in the registration process, does not impose narrow restraints on the variety of information that may be requested of the registrant. It is rather the time and expense involved in the editing, compilation and analysis of this information that limit the scope of the types of information that can be used and consequently the variety of information that should be requested.

If methods of hand processing must be used exclusively, it might be well to limit the request to only such information as is necessary for estimation of size of enrollment in the different divisions for budgetary purposes and the minimum amount of such additional general descriptive data as will interest alumni and parents of the students. When machine methods of processing are available, there are the widest limits on the amount of data that can be analyzed and utilized.

THREE CATEGORIES

Usually the information required falls into one of the following categories:

1. Information used by the administrative officers of the school for making decisions in regard to policy and future operations. Such data include: (a) faculty teaching load in number of courses classified by rank, in number of hours devoted to classroom instruction, laboratory supervision, and preparation, and in terms of ratio of numbers of students on a full-time equivalent basis to full-time faculty equivalent; (b) number of individuals and full-time equivalent enrollment classified by semester or term, division in which enrolled, and ranks, *i.e.* freshman and so forth; (c) number of semester hours

of credit given for each hour of laboratory work; (d) classifications of sections by size and rank of course; (e) cost per student, and (f) forecasts of any of these factors that are subject to change because of changing conditions.

2. Information of general descriptive nature that will be of interest to parents and alumni. Included under this heading are data on locality of residence and religious training, occupation of parent, number of students earning all or a part of their expenses, and similar facts.

3. In the case of publicly supported schools, such information as is required by the state agency exercising supervision over institutions of higher education. These data will usually be of somewhat the same nature as that included in the preceding categories.

This discussion will concern itself exclusively with the type of information included under the first of the three categories mentioned. Further, the discussion is based on the assumption that machine tabulating equipment is available.

The cycle of student accounting at the University of Texas begins with the completion by the registrant of a statistical data card that records his name, place of permanent residence, whether he is entering the university as a former student, college transfer, or from high school, and certain other facts. A code clerk enters this information in numerical code in spaces provided on the margin of the card, and a master card is punched from it.

It would be possible at this time to punch from the student's registration permit a card for each student for each course for which he is registered, containing his name and the section and course number. However, this is not

done for two reasons. First, it would mean that all subsequent changes of course and section must be posted to this file of machine cards. This would involve an enormous volume of work. Second, punching data into the card is the slowest part of the machine process. A faster short-cut method is desirable. Because there will be an average of five course cards for each student, the total number of these cards will be quite large (about 61,000 for the university); hence speed in producing them is essential.

In order to reduce the volume of work, a report required by the university of all departments is utilized. It is the departmental course report to the registrar. This report is prepared shortly after the end of the period of time in each semester during which students are permitted to add or drop a course or change a section without penalty. Consequently, preparation of the individual course cards for each student from the course report eliminates the mass of section and course changes that preceded it. This report includes the department name, number of each course and of each section of that course, and number of students in each section.

CONSIDERABLE SAVING

The standard abbreviation of the name of each course and the number of the course and section are punched into a card. From this card are reproduced as many detail cards as there are students registered for the section. Meanwhile the student's registration permit, showing the courses and sections for which he is registered, has been attached to his master card. One detail card for each course and section for which a student is registered is attached to the master card. Then the master cards, each followed by the detail cards for each student, are placed in the reproducer and the name and other data from the master card punched into the detail cards, which are to serve as grade and statistical cards. This operation is performed at the rate of 100 cards a minute. Since an average good keypunch operator will punch approximately a thousand cards in eight hours, the use of the reproducer involves a considerable saving.

At this point the file of cards, one card for each course and section for each student, is complete. It is necessary to keep the file up to date by posting withdrawals and courses that are dropped, but the bulk of this work has

been by-passed by waiting until the period allotted for changes without penalty to expire before preparing the cards. From this file of cards information in regard to semester hour registration, mean active registrations, and a vast array of other data classified by school, department, semester in which registered, or mode of admission can be tabulated.

For example, total semester hour registration, classified by school and department, can be obtained quickly



by sorting the cards into the desired categories and by adding the first digits of the course numbers, which represent the credit value of the courses in semester hours. This is done on three census dates uniformly spaced in each semester and averaged to get mean active semester hour registration. From these totals, mean active full-time student registration is computed. Further, by sorting the cards into groups according to the last two digits of the course number, which indicate its rank, these data can be obtained for different levels of course rank from freshman to graduate.

ESTIMATE ENROLLMENTS

These figures can be used to estimate enrollment at different levels either on the basis of rank of work registered for, the student's classification (freshman, sophomore), or the school in which the student is registered. Since the legislature deducts expected income from the Veterans Administration for the education of veterans under P. L. 16 and P. L. 346 from estimated operating costs, the university prepares separate estimates of veteran and non-veteran enrollment.

Preliminary estimates are made first for first semester enrollment, various formulas being used — exponential curves, first and second degree polynomials, and an estimate of attrition rates, *i.e.* the percentage of freshmen who become sophomores, the percentage of sophomores who become juniors, and so on, excluding transfers from

other colleges, and then adding in estimated transfers. From these estimates, the one that best agrees with the known factors influencing enrollment is selected. Second semester enrollment is then estimated as a percentage of first semester enrollment; for there is a fairly stable relationship between these two factors. Estimates of summer school enrollment are based on summer enrollment of past periods, for there is no stable relationship between long and summer session figures.

Because there were no historical data available in 1946 for estimating veteran enrollment, a special method was evolved. In view of a similar situation arising if the G.I. bill is reenacted for the benefit of veterans of Korea, this procedure may be of interest. All veterans were required to fill out a special questionnaire stating: (1) degree or degrees desired; (2) number of semester hours of credit attained toward degree; (3) law under which receiving educational benefits, *i.e.* P. L. 16 or P. L. 346; (4) number of months' eligibility to which entitled under current certificate of eligibility; (5) number of months of this eligibility consumed as of registration date, and certain other facts of general information.

SOURCE OF INFORMATION

Tables were prepared showing the number of months necessary to obtain each degree offered by the university on the assumption, first, that the student attended school nine months a year and, second, that he attended school 12 months a year. These tables showed for each degree plan just how many months it would take a student with a given number of semester hours of credit to complete requirements for the degree using standard work loads for the different schools, *e.g.* 16 hours for engineering students and 12 for law students.

A sample of questionnaires was drawn and a coded transcript sheet made for each, containing the following data: (1) number of months' eligibility for educational benefits remaining as of registration date; (2) number of months necessary to obtain degree desired or number of months necessary to obtain both graduate and undergraduate degrees, if more than one degree was wanted; (3) excess of months necessary for degree or degrees desired over months of eligibility.

This information was punched into cards and the cards sorted, *i.e.* classi-

fied, first according to months necessary to obtain the degree or degrees desired. By use of these data, it was possible to determine the average length of time that veterans in the sample would require to complete their degrees and the number who would be in school in semesters subsequent to the registration date. When these figures were applied to the total group and estimated figures for college transfers were added in, it was possible to estimate how many veterans would be in school in subsequent periods by using both the nine months' and 12 months' assumption as to regularity of attendance. Study of summer session enrollments made possible an estimate of how many veterans would attend school nine and how many 12 months a year. A weighted average of estimates was prepared from these data to be used as a final estimate.

By classifying the veterans first on the basis of number of months' eligibility for educational benefits at government expense and, under this heading, according to number of months that time necessary to obtain degrees exceeded eligibility, it was possible to estimate the probable number who would have enough months' eligibility to complete their degrees (zero months excess of time to degree over time of eligibility) and the number whose degrees would require them to remain in school after their eligibility was exhausted.

This method gave satisfactory short-term estimates but, as would be anticipated, accuracy fell off rapidly after the second year from date of estimate. After historical data were available, this method was used to give figures that would serve as a check on more conventional methods of estimation.

The current and anticipated declines in enrollment because of entry of young men of college age into the armed forces pose difficult problems of finance for colleges. These problems will be further aggravated for publicly supported schools by the effect of dwindling sources of revenue for state and local governments as federal taxes bite deeper into incomes. Consequently, the measurement and control of costs take on added significance for administrators.

Measurement of total cost of educating each student is a simple matter. Determining costs on the basis of rank, i.e. freshman, sophomore and so on through graduate courses, and by department and division is a more diffi-

cult task. If the procedure recommended by the National Committee on Standard Reports for Institutions of Higher Education for determining detailed costs for instructional functions is used, the volume of work required is considerable. However, it is impossible to exercise positive control of costs in the various departments and divisions without adequate information as to the amounts and sources of those costs.

A more fundamental difficulty lies in the fact that the greater portion of annual expenditures goes for faculty salaries, and reduction of this item is feasible only by reduction in the size of the faculty, a prospect that is painful

to contemplate. An essential ingredient of such a cost study is information on semester hour enrollment, classified by department and by rank of course. These data are readily obtainable from the file of cards described.

By introducing a numerical symbol for the instructor of each section, the data can be further classified by instructor as well as by department and course rank. This will eliminate the necessity of having faculty members estimate the fraction of their time devoted to teaching the various levels of work and at the same time will greatly reduce the amount of time and labor expended on the study.

How to establish a

UNIT COST PROGRAM

E. T. JOLLIFFE

Assistant Business Manager
State University of Iowa

UNIT COST COMPUTATIONS FOR EDUCATIONAL institutions have not been popular for many reasons. Among these reasons are: lack of uniformity among institutions in accounting for expenditures and enrollments; inability to determine a reliable measure of the product of educational institutions; lack of incentives for the use of unit costs; fear of their misuse, and the tremendous amount of work involved.

ORDERLINESS IMPORTANT

However, in view of the rapidly increasing budgets of educational institutions and the greater need for critical administrative review of these budgets as well as the increased emphasis on some type of unit cost computations in relation to veteran instructional contracts, U.S. Public Health surveys, and other types of instructional projects in which we may be involved in the near future, it seems appropriate to review our attitudes toward the unit cost approach of analyzing expenditures. The least that can be done is to see that our budget and accounting systems are in order,

or are put in order, to make this type of analysis possible. Even if unit costs are never computed from these records, there will have been nothing lost and much gained by taking this initial and basic step.

Unit costs may be established for three purposes: (1) for comparisons within an institution, such as between colleges and departments or periods of time; (2) for comparisons between institutions, and (3) for use in instructional programs or surveys with the federal government. Although this article is written with particular reference to instructional unit costs, similar principles are applicable to any other type of unit cost computations.

In establishing any type of unit cost, provision must be made for obtaining the two basic factors: (1) the dividend, which is the total expenditure of the classification under study, and (2) the divisor, which is the number of units to which the expenditure item is related.

In setting up a system to obtain the expenditure item, I can suggest no better guide than to follow the classi-

fication and report system recommended by the National Committee on Standard Reports for Institutions of Higher Education in its book "Financial Reports for Colleges and Universities," published in 1935. (It is my understanding that the current revision of this book is nearly ready for publication.)

However, the mere setting up of such a system is no guarantee in itself that reliable expenditure figures will automatically be available. In order to ensure reliable results from any established budget and accounting system, there must be constant and conscientious effort to correctly classify budget items and documents of original entry in accordance with the system established.

Take a specific example: Reliable results could not be obtained if the salary of a faculty member whose entire time is spent in teaching were budgeted and charged to a research account or to the account of a department other than the one in which he is teaching. Similarly, an expenditure for materials for use in one department should not be charged to the account of some other department.

INSTITUTIONS DIFFER

One of the significant differences between educational institutions is the difference in the degree of their research and service activities as typified by the difference between a small liberal arts college and a large university.

Differences in the degree of these activities also exist between departments of a university. In many situa-



tions it is not practical to attempt to account separately for expenditures resulting from research and service activities.

In many educational institutions, a faculty member is expected to devote a part of his time to research and service activities that are not separately budgeted and accounted for but that are, by their nature, on an individual basis. In such situations, where sepa-

rate budgeting and accounting for these activities are not practical, it becomes necessary to segregate teaching costs for such individuals from other costs by an analysis of the time spent by these faculty members on each type of activity and a proration of salary on this basis for unit cost computations. A satisfactory form for this purpose may be found on page 197 of "Financial Reports for Colleges and Universities."

IMPORTANT FACTOR

Although of not so great importance in unit costs established for use within the institution, a factor of great importance in unit costs for use in comparisons between institutions is the treatment of certain administrative and general expense items for which alternative treatments are permitted in the recommendation of the National Committee on Standard Reports. For example, expenditures for such items as telephone rental and premiums on group insurance policies and retirement annuities may be accounted for under the general expense group or they may be charged to departments. Another example would be the practice of not making charges to auxiliary enterprises or other activities for the determinable or pro-rata share of expenditures for such items as administration, physical plant utilities, or other applicable items normally budgeted in the general education budget. I believe that, until specific standards are established as a guide with respect to such points, it will be difficult to achieve uniformity with which such items are handled by different institutions and consequently interinstitutional unit cost comparisons will have relatively little value.

It is true that differences in accounting practices may be adjusted on some determinable or pro-rata basis in the cost analysis work sheets. However, the greater the differences in accounting practices, the more difficult it becomes to reconcile these differences in the work sheets. Conceivably, differences in accounting practices could approach the ridiculous extreme where existing accounting reports would be worthless and a new classification of expenditures would be developed from original source documents for cost analysis purposes.

Of no less importance than the classification of expenditures in establishing a unit cost program is the item of the measure of the product of the

institution. So far as I know, qualitative measures of the product of instruction cannot be obtained by any of the methods now available because no test has yet been devised to measure the degree to which an institution has accomplished its teaching purpose. Nevertheless, for whatever they may



be worth, quantitative measures can be obtained and used for unit cost purposes. These quantitative measures of the teaching product can be obtained from the registrar's records and may be in the form of total different students during a period, the number of students enrolled on a given date, the number of student class hours or credit hours of instruction during a given period, or some other measure. The type of measure selected will depend primarily on the use that is to be made of the unit cost computation.

DIVIDING IS FINAL STEP

Having established both the dividend and the divisor factors, the final step in obtaining unit cost is that of dividing. The reliability of a unit cost thus obtained will depend not only on the care that has been exercised in developing the two basic factors but also on the judgment used in selecting a dividend and divisor that have a logical relationship. Lack of such judgment would result in unit costs that are meaningless.

So far as I know, the most comprehensive outline and explanation of a unit cost procedure may be found in "Financial Reports for Colleges and Universities." I suggest that anyone contemplating unit cost computations study this procedure carefully. The extent to which this outline and the analysis forms need to be used may depend to some extent on the manner in which the accounts are kept and the purpose for which unit costs are being established. A good general discussion of unit costs also may be found beginning on page 130 of "The Finance of Higher Education" by John Dale Russell.

Keeping the **SMALL COLLEGE PLANT**

operating economically and efficiently

JOHN H. KREINHEDER

Superintendent of Buildings and Grounds
Middlebury College, Middlebury, Vt.

IT IS HARD TO FIND ANYTHING APPROACHING a standard organizational pattern in the small college field. A small college superintendent may be a grounds specialist or a landscape architect, with utility operation delegated to trained men who may be independently responsible to the business manager. Or the superintendent may be an engineer only slightly conversant with the problems of adjusting ornamental shrubs to their environment, and keeping in his own hands the immediate oversight of the central heating plant. In any case, his organization will be an organism adapted to his personality and peculiarities, and in all probability it will have highly individual internal relationships in which, for example, a single individual may be simultaneously a labor foreman, a chief of police, and the manager of a hockey rink. The superintendent of such a department is more likely than not to know exactly how each individual in his department is employed each day and, perhaps as important, to know something of each employee's domestic problems.

An effective department of buildings and grounds in a small college must have a competent head. He can hardly be expected to be an expert in all the phases of work covered by his department, but he should be a reasonably satisfactory administrator and competent in at least one field, perhaps that one most vital to his college. His responsibility should be clear, and his direction explicit. Through and with the business manager he should have access to the appropriate committees of the college's governing bodies in order to state his department's needs and to gain a clear understanding of his college's objectives. He must be given the support and the authority to act effectively and without fear of interference in his reasonable sphere.

Given proper direction he will no doubt proceed to shape his organization in accordance with the dictates of

established traditions and inherited organizational pattern, taking careful note of the skills of old and faithful — though not necessarily efficient — employees he will find holding tenure in his department. Other organizational determinants will include the nature of the local labor market, the relation of established college wage rates to going rates in the area and to faculty salaries, the availability of competent contractors prepared and equipped to perform work at competitive costs, and the requirements of the institution.

The maintenance organization that will be developed under these circum-

stances normally will have a maintenance crew probably built around a skilled mechanic who is competent, preferably, in a variety of trades and who, while working with tools himself, will direct the routine work of the regularly employed carpenters, electricians, plumbers, steamfitters and general maintenance men; second, a janitorial crew under a foreman who will be responsible for the cleaning, care and some part of the operation of the buildings and perhaps also of the residence halls. There will be whatever night watchmen and campus police may be required, a few painters, and



Outdoor mechanization has proved its worth. Most of it is out of the experimental stage and is a sound investment for those with acreage.

a ground crew that is generally regarded as a labor pool to be drawn upon for unskilled labor whenever or wherever required. There will also be the crew of firemen necessary to staff the heating plant.

The total number of men in the organization, of course, will depend upon a number of obvious factors, influenced by the specialty or interests of the superintendent. A superintendent who had been in construction, for example, will tend to expand the construction and alteration forces of his department. Others, with other leanings, may be more concerned with housekeeping and less with care of grounds. Some may wish to develop an entirely self-sufficient department, capable of handling all of the many kinds of work that will need doing, and they will, consequently, engage refrigeration and air conditioning mechanics, draftsmen, landscape architects, and the like.

Our hypothetical buildings and grounds department has, then, a certain number of men doing certain kinds of work for which they are supposed to be especially qualified. But the best men will be inefficient if they work without proper tools and supplies and without the facilities of an adequate shop. Some departments of buildings and grounds in small colleges are housed in basements, garages and temporary quarters ill-adapted to their use. Others enjoy palatial quarters in buildings designed and erected specifically for their use and equipped with all the machine and hand tools that conceivably can be required, supported by a central storeroom carrying a large inventory of supplies and parts.

PITFALLS TO AVOID

Overexpansion and overequipment are common pitfalls of many buildings and grounds departments. The demand for services and facilities too often justifies the offering of the services only after the offering has created the demand. The solution may be a greater reliance on rented transportation, and a fuller use of facilities offered by local contractors and shops. For instance, we discovered several years ago that contractors, paying union scales and sending their men a distance of 35 miles to the work, could do our work at Middlebury at lower costs than our then current painting crew, notwithstanding our purchasing advantages and lower wage rates.

Given a buildings and grounds organization adequately but not over-

manned and equipped, the problem then becomes administrative in character. Precisely how, for example, is routine maintenance accomplished — the replacement of the blown fuse, the clearing of a clogged sanitary line. That is, how does the department learn that the work is to be done and how is the doing of it directed?

In general, there are two approaches to this problem. One is the "wait and see" approach. The other is the preventive maintenance program backed by competent periodic inspection of the entire plant. Colleges normally follow a combination of the two, extending a more or less complete preventive program to the maintenance of motors and controls, refrigeration, roofing, exterior painting, and trees and shrubs, but depending upon faculty, staff and student reports of minor or major derangements and breakdowns in plumbing, heating, lighting and water systems and services. This usual practice by no means exhausts the economic possibilities of a sound preventive maintenance program, which could, I believe, be usefully encouraged and extended.

Large organizations may be sufficiently complex to require and justify the typing and retyping of forms for simple maintenance tasks; the small college organizations may be informal enough to use no work order forms. Some control of work done and of the men doing it usually is necessary and so a minimum of paper work and routine is required, but paper work and complexity of forms should be minimized. This not only reduces printing expense but also interposes the fewest possible hurdles between the original report and the completion of the work. Forms should be used only to establish the essential controls and records and to provide the basic data for whatever accounting may be required.

In this matter of accounting, practice varies widely. The majority of small colleges use the minimum breakdown that will provide the necessary information for budgetary control and for the annual reports. A few institutions cost all but the most routine work, which is charged against standing maintenance orders. With the tightening of academic budgets, it may be worth while to review the present practice with the view of eliminating the nonessential. Waste and inefficiency easily may be overlooked for considerable periods where no form of cost accounting is practiced. Even the smallest department will find it worth while

to make periodic checks on the cost of typical work by its own forces, be it plumbing, painting, or whatever, to ensure against the seemingly inevitable lapses of efficiency that will appear.

Accounting practices and control are closely related to the budget problem. A general approach that has merit and is being used successfully by many institutions relates maintenance costs, not including operating costs, to the building replacement costs. Account is taken of the intensity of use of each building, which has an obvious bearing, and of the type of construction. With these and similar factors considered, building maintenance costs seem to vary about the 0.85 to 1.75 per cent range, referred to replacement costs. A charge of this size will not, of course, cover obsolescence. Remodeling and modernization costs will be in addition.

SOME USE RESERVE SYSTEM

An alternate method was adopted by several colleges some years ago. It was built around the establishment of reserves for maintenance, with annual additions to the reserves of sufficient amounts to cover, in theory, the major but less usual items of masonry pointing, reroofing, and the like. This reserve system, usually based on a percentage of cost, modified by experience, has attractive features. Unfortunately, during recent years reserves have been unable to keep step with rising costs.

Another aspect of the budget problem is of some interest: this concerns the relation of the buildings and grounds budget to other academic or nonacademic budgets of the same institution. For, while buildings and grounds superintendents sometimes may forget that they head service departments, the faculty and staff never forget and press for services and facilities not contemplated in any part of the buildings and grounds budget. There is nothing less helpful to good interdepartmental relations than a widespread popular belief that the buildings and grounds group has at its command funds that could and should be spent in the improvement of academic service and facilities. This divergence of view often seems to arise from the failure of the superintendent to make his department and its work, together with its limitations, more widely understood.

A contributing factor is the idea that funds for improvements, as distinguished from operation and maintenance

nance, are spent largely at the discretion of the superintendent, an idea that is encouraged by the observation that the buildings and grounds department does in fact expend the funds. To avoid these misunderstandings, it seems that the funds made available for academic purposes might well be separated from the regular buildings and grounds budget, and that this portion of the budget be reviewed by an appropriate representative faculty group. Normally no one wants to multiply committees but the results to be achieved by having faculty designate the relative importance of, and assign priorities to, requests for academic improvements are well worth the effort.

This matter of faculty-staff relations should not be taken too lightly. Certainly in the smaller colleges, where no department, academic or otherwise, has funds that it regards as sufficient, cooperation to minimize the effect of stringencies is important. This mutual understanding, where it exists or can be established, is a benefit to the institution generally, and especially to the department of buildings and grounds. We depend on our faculties for a great deal of the raw information that guides much of our maintenance spending.

The relation of buildings and grounds departments to other departments of the college takes a variety of forms. To the dormitory and dining halls managements the superintendent is a high priced contractor enjoying a monopoly of the work, a monopoly not always justified. To the athletic department the buildings and grounds department may be that recalcitrant group that only under considerable pressure performs its obvious duties. To the individual members of the faculty the superintendent may be a moribund incompetent, outrageously neglecting his clear duty, but saved from public disgrace solely by the good sense and co-operative attitude of a few of the more pleasant mechanics.

To the superintendent it appears that his clientele thinks of his service building as a place housing every kind of furniture and every part or piece of equipment that may be required, and a long bench on which sit a variety of mechanics waiting like bellhops for a call for their services.

Relations between the superintendent and the deans of students need to be happy ones. The superintendent is a highly vocal critic of student behavior both in and out of doors and a caustic commentator on the inadequa-

cies of student discipline. No buildings and grounds department imposes other than monetary penalties for action not in accordance with college regulations, but through its night watchmen and campus police, if any, it detects and reports misbehavior to the deans. Under these circumstances understanding and cooperation are essential, yet too often lack of clear and definite directions to all parties concerned results in a breakdown of enforcement with unhappy effects on student morale.

The department of buildings and grounds is thought of as that agency which, with some degree of proficiency and dependability, houses, warms, lights, cleans and otherwise services and protects the various college activities. How to accomplish this at the least long-run cost to the college is the pressing question. The search for cost cutting practices will no doubt uncover a variety of techniques, new and old.

There are those who contend that the practice of staffing buildings in the usual manner with old men equipped with push brooms and sweeping compound must give way to vacuum cleaners and floor waxers and polishers operated by trained crews working at night. In certain large institutions the case has been proved; its applicability to the small college is still an open

question only and its use has little if any relation to the life of the structure to which it is applied. It is hard to imagine a president, swayed by this argument, discontinuing exterior painting.

Engineers operating heating plants can be depended upon to wring as much steam per dollar of fuel from their boilers as possible. The same men can and will tell you any number of ways to improve the efficiency of their plants, and some will cost less than you might think. It is easy to forget that the boilers in a small central heating plant can burn the equivalent of their cost in fuel in two years or less. Economies in the use of steam are almost always possible.

Outdoor mechanization has proved its worth beyond any doubt. Tractor drawn gang mowers, tractor mounted plows and loaders for snow handling, power trimmers and clippers are all out of the experimental stage and are sound investments for anyone with acreage to care for.

There may be maneuvers more practical than these that will help reduce costs. But be warned against the substitution of cheap materials, where not forced by shortages, and particularly against cheap labor. A superintendent of a small southern college plant is reputed to have said that no school can afford the services of the handy man, the jack-of-all-trades maintenance mechanic. No doubt many of our institutions are blessed with such individuals — conscientious, loyal, many years on the college pay roll, and grossly inefficient. In their misguided efforts at economy and efficiency, these farm mechanics are known to spend hours attempting to repair or salvage a 50 cent part. You will find that first-class men, fairly paid and well directed, give the lowest costs.

Buildings and grounds performance is ultimately judged by its results. When efficient operation is the rule, it is taken for granted by the community it services; like utility services generally being noticed only when its services fail. It is the purpose of our buildings and grounds department to continue in just such a way — to be to the greatest possible number of its clientele an anonymous service content with the understanding and support of the administration to which it is responsible.

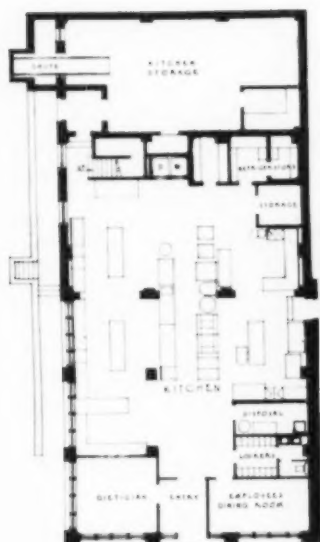
From a paper presented at the workshop of the Eastern Association of College and University Business Officers, New York City, February 1951.



Can any school afford the services of a handy man, the jack-of-all-trades?

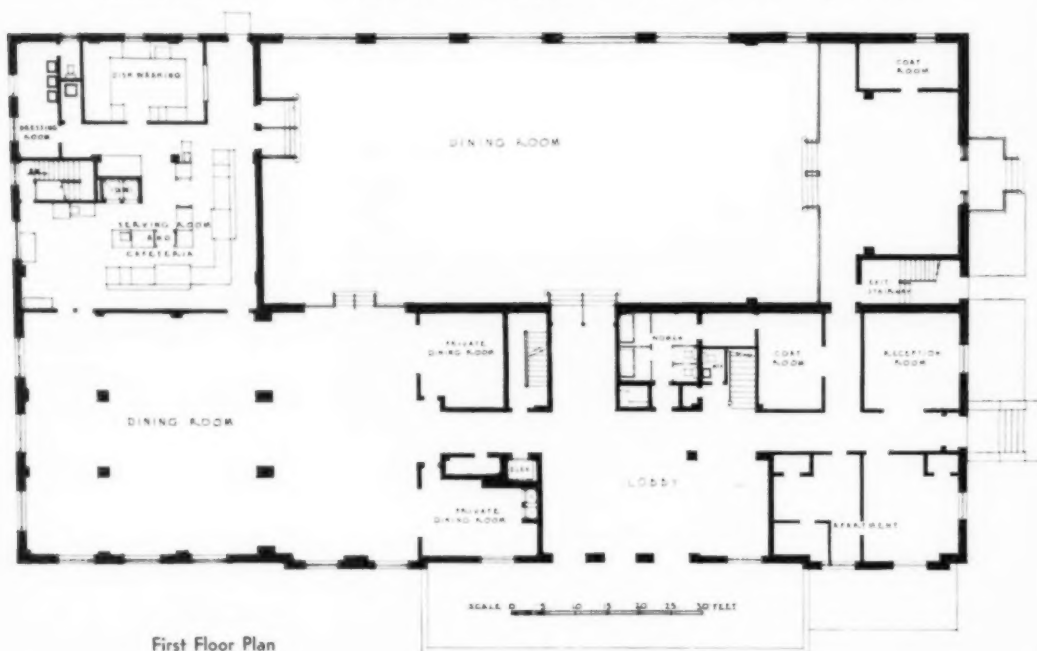
question — at least as concerns the use of night crews. We have been brought up on the slogan "save the surface and you save all." But the Department of Agriculture in its 1949 yearbook says that paint applied to wood is a deco-

DINING HALL ADDITION to a residence hall

solves acute problem at women's college

Kitchen Plan

New kitchen and equipment on the ground floor of dining hall addition.



First Floor Plan

DAPHNE M. SCHAUB

Director of Dining Halls
Pennsylvania College for Women

IN 1946 THE ALUMNAE ASSOCIATION of Pennsylvania College for Women started a campaign to raise \$200,000 for a new dining hall building for the college. By 1948 the sum of \$100,000 had been raised. But building costs had increased to such an extent that \$200,000 would not be enough, and it looked as if it might be years before adequate food service facilities could be realized.

In March 1950 an idea was conceived: Why not build on an addition to the existing dining hall and kitchen in Woodland Hall, the largest and most centrally located dormitory on the campus? Why not close in and build a kitchen in the garage area in the basement of the building; convert the infirmary, directly above the garage area, into a service unit, and build an addition for a new dining room that would change the shape of the building from an L to a rectangle? This, it was found, could be accomplished for \$185,000.

The idea was presented to the alumnae association, which voted not only to raise the additional \$85,000 but also to give the board of trustees the "go ahead" to build immediately.

Some of the advantages in building the addition were: Funds on hand were sufficient to start building; space would be made available at the rear of the building for storage facilities and for all deliveries; a one-floor addition for the dining room would make possible a sun deck, and at the front of the building three more floors could be added at a future date providing for an infirmary and increasing the number of dormitory rooms.

The one disadvantage was having the kitchen one floor below the service area and the dining rooms. This has been taken care of by the use of electric dumb-waiters, an intercommunication system, and a back bar in the service area that has both heated and refrigerated storage units.

Blueprints were drawn by the college architects, Ingham, Boyd and Pratt; bids were accepted on June 10, and construction began on June 29, 1950.

A steam booster was installed so that the food service department can have



The dining hall (above) and the service area (below) in the new addition to Woodland Hall at Pennsylvania College. The disadvantage of having the kitchen one floor below the service area and dining rooms is taken care of by the use of electric dumb-waiters, an intercommunication system, and a back bar in the service area with heated and refrigerated storage units.



steam at all times, whether or not the college heating plant is in operation. It was found that the electric rate is low because of the high load of electricity carried by the college so we standardized on electric equipment throughout.

A garbage disposal system was installed that facilitates disposal and increases sanitation. Ranges, broiler, fry kettles, and bake ovens have been placed on sanitary bases.

The flooring used in the kitchen and serving area is red quarry tile. The service unit has two identical cafeteria counters and back bar, dishwashing room, utility room, and waitress rooms.

All deliveries are made to the rear of the building. Milk, ice cream, and

bakery goods are delivered to the service area. A ramp facilitates the delivery of case goods, fresh produce, and meats to the basement level.

Folding doors connect the high ceilinged, well ventilated dining room with the old dining room area. The 54 inch round tables and Windsor chairs are of maple. The floor covering is asphalt tile in a brown tone that blends well with the furniture and deep green walls. The five 12 foot windows have beautiful print draperies in Chinese red and yellow. A public address system, with 12 speakers in the ceiling, has radio, record player, and microphone.

The old serving pantry and dishwashing rooms have been converted to

private dining rooms, separated from the large dining room by folding leatherette doors. Decoration of these dining rooms is Colonial, with rectangular tables seating 12, ladder-back chairs, and hutch cupboards.

Since last October when the dining hall addition was finished, Pennsylvania College for Women has had the use of an adequate kitchen, with more working space, much better storage space, good lighting, and sanitary conditions. There are 42 feet of counter space compared to the former 16 feet, and 6291 square feet of dining room space compared to 2560. Most heartening of all is our knowledge that our entire campus community can be served without crowding.

PROGRAM OF 1951 COLLEGE FOOD SERVICE INSTITUTE

Delegates planning to attend the 1951 College Food Service Institute July 30 to August 1 in Chicago, under the joint sponsorship of Northwestern University and College and University Business, should send registration checks immediately. Enrollment is limited to 125 delegates, with a maximum of two registrants from an institution. The tuition fee is \$17.50. Checks should be made payable to Food

Service Institute and forwarded to Willard J. Buntain, director of dormitories, Northwestern University, Evanston, Ill.

Harold W. Herman, editor of College and University Business, will make hotel reservations for delegates at the Hotel Knickerbocker, Chicago. Delegates should advise as to date and time of arrival in Chicago so that hotel accommodations will be ready for occupancy upon arrival.

MONDAY, JULY 30

General Organization

Presiding: J. W. Cannon Jr., publishing director, College and University Business.

9:30—Opening remarks, J. W. Cannon Jr.

9:35—What's Your Job? R. M. Cunningham Jr., editorial director, College and University Business.

9:45—College Food Service in 1951, Dr. Mary deGarmo Bryan, head, department of institution management, Teachers College, Columbia University.

10:20—Discussion

10:45—What's Ahead in Foods? Lt. Cmdr. James Corrick, Food Research and Development Facility, U.S. Navy, Bayonne, N.J.

11:20—Discussion

Purchasing and Cost Control

Presiding: Paul Hannum, director of residence halls, University of California, Los Angeles.

2:00—Keeping Your Costs in Line, Theodore W. Minah, director of dining halls, Duke University.

2:30—Discussion

2:45—Food Portion Cost Control, Arthur W. Dana, food service consultant, New York City.

3:15—Discussion

3:30—Making the Menu Sell, Veronica Morrissey, director of food service, L. S. Ayres and Company, Indianapolis.

4:00—Discussion

4:30—Bus trip to Sargent Hall, Northwestern University

TUESDAY, JULY 31

Manpower

Presiding: Robert Summers, director of food service, Middlebury College, Middlebury, Vt.

9:00—Inventory Your Manpower, Paul Valentine, director of personnel, Stevens Hotel, Chicago.

9:45—Discussion

10:00—What About Student Labor Costs? Christine Ricker, director of food service, Stanford University.

10:30—Discussion

10:45—Supervisory Training, Donald Greenaway, head, department of restaurant management, Michigan State College.

11:15—Discussion

11:30—Labor Savers, J. N. McKellin, director of food service, Wheaton College, Wheaton, Ill.

12:00—Discussion

12:15—Luncheon at Jacques French Restaurant.

Problem Clinic

2:00—Dishwashing Dividends (motion picture by Economics Laboratory).

2:35—Discussion

Small College Clinic. Presiding: Harold W. Herman, editor, College and University Business.

2:45—Equipment Records

3:00—Discussion

3:10—Preventive Maintenance

3:25—Discussion

3:45—Special Groups and Conference

4:05—Discussion

Large College Clinic. Presiding: Willard J. Buntain, director of dormitories, Northwestern University.

2:45—Equipment Records

3:00—Discussion

3:10—Preventive Maintenance

3:25—Discussion

3:45—Special Groups and Conference

4:05—Discussion

4:30—Demonstration of cooking by use of infra-red lamps. Elsie D. Haney and Jack Newman, Armour and Company.

WEDNESDAY, AUGUST 1

Layout and Equipment

Presiding: Fern W. Gleiser, professor of institution economics, University of Chicago.

9:00—The Architect Looks at Food Service, Laurence B. Perkins, architect, Perkins and Will, Chicago.

9:35—Discussion

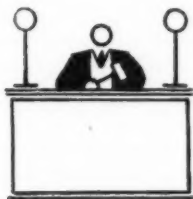
9:50—How Would You Do It? Sabra Kennedy, Southern Equipment Co.

10:30—Discussion

10:45—General summary and question box.

11:30—Adjournment

BASIC FACTS ABOUT the University of California



LOYALTY OATH CASE

T. E. BLACKWELL

Vice Chancellor, Washington University, St. Louis

ON APRIL 6, 1951, THE DISTRICT court of appeals of the state of California handed down a decision¹ of interest to all citizens of this country and of even greater interest to those associated with institutions of higher education. The so-called "loyalty oath" case, involving 18 members of the faculty of the University of California, has been the subject of vigorous discussion in the public press for many months. Despite this widespread publicity, it may be worth while to summarize the basic facts of this important controversy.

In January of 1949, James H. Corley, controller of the University of California, reported² to President Robert G. Sproul that there was a strong movement in the California legislature to initiate a constitutional amendment that would reduce the freedom from legislative control long enjoyed by the university. In order to combat this serious threat to the autonomy of the university, President Sproul apparently decided to placate the forces of the opposition by proposing to his board of regents that, in addition to the usual constitutional oath of office³ required of all public officials of the state of California, all university employees be required to take the following oath:

"I do not believe in and am not a member of, nor do I support any party or organization that believes in, advocates or teaches the overthrow of the United States government by force or violence."

¹Tolman et al. v. Underhill, 229 P. 2d. 447.

²Stewart, George R. "The Year of the Oath," Doubleday & Co., Inc. (1950).

³Constitution of the state of California: Article 20, Section 3. "I do solemnly swear that I will support the Constitution of the United States and the constitution of the state of California, and that I will faithfully discharge the duties of my office according to the best of my ability."

The recommendation of President Sproul was unanimously adopted by his board of regents at its meeting on March 25, 1949. The May issue of the *Faculty Bulletin* contained a statement that "acceptance letters" for 1949-50 would include the new oath which must be signed before salary checks could be issued. In June of 1949, the academic senate of the university asked an advisory committee to meet with President Sproul in an effort to work out a compromise.

Discussions continued until the meeting of the board of regents held on April 21, 1950, at which a resolution was adopted providing that, after July 1, 1950, all employees would be required to sign the following statement:

"Having taken the constitutional oath of office required of public officials of the state of California, I hereby formally acknowledge my acceptance of the position and salary named, and also state that I am not a member of the Communist party or any other organization which advocates the overthrow of the government by force or violence, and that I have no commitments in conflict with my responsibilities with respect to impartial scholarship and free pursuit of truth. I understand that the foregoing statement is a condition of my employment and a consideration of payment of my salary."

The resolution further provided that:

"In the event that a member of the faculty fails to comply with any foregoing requirement applicable to him he shall have the right to petition the president of the university for a review of his case by the committee on privilege and tenure of the academic senate, including an investigation of and full hearing on the reasons for his failure so to do. Final action shall

not be taken by the board of regents until the committee on privilege and tenure, after such investigation and hearing, shall have had an opportunity to submit to the board, through the president of the university, its findings and recommendations. It is recognized that final determination in each case is the prerogative of the regents."

Thirty-nine members of the faculty who refused to sign the affirmation were granted hearings before the committee on privilege and tenure and were cleared. At the meeting of the board of regents held on July 21, 1950, President Sproul recommended the reappointment of the 39 nonsigning members of the faculty.

By a vote of 10 to 9, the regents approved this recommendation. After the vote had been taken, one of the regents gave notice that he would change his vote and declared that he would move to reconsider at the next meeting. When this meeting was held on Aug. 25, 1950, the motion to reconsider was adopted by a vote of 12 to 10, and then by a unanimous vote the nonsigning members of the faculty were granted 10 days in which to comply by signing the required affirmation.

Upon failure to receive notification of appointment for the academic year 1950-51, 18 nonsigning members of the faculty requested the district court of appeals to issue a writ of mandate to compel Robert M. Underhill, as secretary and treasurer of the board of regents, to issue their letters of appointment. On Sept. 1, 1950, the court issued a temporary writ to protect their status during the progress of the trial, and on April 13, 1951, Mr. Underhill was ordered by the court to issue the letters forthwith.

The court, in its opinion, took judicial notice of the fact that:

"All of the petitioners are scholars

of recognized ability and achievement in their respective fields. Additionally it should be noted that it is conceded that none of the petitioners has been charged with being a member of the Communist party or in any way subversive or disloyal.

"It is important to note by way of background that the regents of the university in 1920 by resolution provided 'that appointment as associate or full professor carries with it security of tenure in the full academic sense.'"

The court referred to Section 9 of Article IX of the constitution of the state of California in which the University of California is established as a "public trust," to be administered by the corporation known as "The Regents of the University of California," subject "only to such legislative control as may be necessary to ensure compliance with the terms of the endowments of the university and the security of its funds."

The court then referred to two prior court decisions upholding the broad area of autonomy of the board of regents. The first case,⁴ decided in January of 1934, involved the petition of two students of the university for a writ of mandate to compel the regents to readmit them, they having been suspended from the university by reason of their refusal to take certain compulsory courses in military training. Their petition was not granted, and the court justified its refusal on the following grounds:

"The regents have full power and authority, and it is their duty to prescribe the nature and extent of the course to be given, and to determine the question of what students shall be required to pursue them."

The second case⁵ cited by the court

⁴Hamilton v. Regents of the University of California, 28 P. 2d. 355.

⁵Wall v. Board of Regents of the University of California, 102 P. 2d. 533.

was concerned with the petition of a citizen of the state for a writ of prohibition to prevent the retention of Dr. Bertrand Russell, the famous English mathematician and philosopher, as an instructor. The writ was refused in an opinion dated May 2, 1940, on the following grounds:

"The question of Dr. Russell's qualifications to act as an instructor at the University of California is one lying solely within the discretion of the board of regents, and their determination of his qualifications is final.

"Experience has demonstrated that the people of the state have wisely vested this discretion in the board of regents, as it is a matter of international knowledge that the University of California has, under the guidance of the board of regents, become one of the great universities of the world."

In view of these two decisions, it is clear that the court would, only with great reluctance, substitute its judgment for that of the board of regents. In compelling the regents to reinstate the nonsigning petitioners, the court relied upon the specific mandate of the final paragraph of Section 9 of Article IX of the constitution of the state of California:

"The university shall be entirely independent of all political or sectarian influence and kept free therefrom in the appointment of its regents and in the administration of its affairs."

The court reminds the public that: "In the practical conduct of the affairs of the university the burden of so preserving it free from sectarian and political influence must be borne by the faculty as well as by the regents. Hence, if the faculty of the university can be subjected to any more narrow test of loyalty than the constitutional oath, the constitutional mandate in section 9 of Article IX would be effectively frustrated, and our great institution now dedicated to learning and

the search for truth reduced to an organ for the propagation of the ephemeral political, religious, social and economic philosophies, whatever they may be, of the majority of the board of regents of that moment."

By a vote of 11 to 10, the board of regents, at its meeting held on April 20, 1951, decided to accept this decision of the district court as final. Governor Earl Warren, sitting as chairman of the board of regents, had ruled that two dissenting members, not present, could not vote by proxy. It seemed that the final chapter of this long controversy, so damaging to the educational reputation of the University of California, had been written.

However, a minority group of the regents immediately instructed its special counsel to appeal to the supreme court of California. On May 31, 1951, the supreme court, on its own motion, issued an order granting a hearing on this case and ordering it transferred from the district court of appeals into the supreme court. No date has been set for the hearing.

The decision of the court of appeals puts the constitutionality of the Levering Act in question. This act had been passed by the California legislature and signed into law by Governor Warren on Oct. 3, 1950. By the terms of the act, all public employees were placed in the civil defense organization of the state and then, as members of such organization, were required to take a special oath of loyalty in addition to the regular constitutional oath of office. The California legislature has drafted an amendment to the constitution of the state in an attempt to incorporate the terms of the Levering Act into the organic law itself. This proposed amendment has yet to be ratified by the voters of the state. The educational world will await with profound interest the next move in this dramatic struggle.

This Business of Education . . .

. . . is a very confusing and complicated enterprise for some laymen to understand. Wendell Murray of North Carolina State College will tell his side of the story in the August issue.

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NEWS

**How to Get Materials for Construction . . . Available Materials and
Substitutes Are Listed . . . Workshop on Fund Raising . . . Small Colleges
Can Handle Military Research . . . Minnesota Offsets Emergency Dismissals**

N.P.A. Issues List of Materials That Are Currently Available

WASHINGTON, D.C.—The National Production Authority on June 20 brought out a guide for procurement and substitution of materials for the armed forces, government agencies, private business, and institutional buyers. N.P.A. officials plan to revise the list periodically to keep abreast of changes. In this four-page pamphlet, "List of Basic Materials and Alternates," are classified approximately 550 materials according to their present availability. This list is planned as N.P.A. officials plan to revise the list periodically to keep abreast of changes.

The 550 materials are listed in the following three groupings:

Materials in Very Short Supply, for which alternates should be used wherever possible.

Materials in Tight Supply, for which expanded use should be avoided by industry.

Materials in Fair Supply, which should be used as substitutes for those in Groups 1 and 2 wherever possible.

N.P.A. officials declare that the following factors were weighed in determining each grouping: availability of the material, sources (domestic and foreign), transportation required, production capacity, manpower, military requirements, defense supporting programs, stockpiling, domestic industries and the over-all civilian economy.

The pamphlet says of the current materials situation:

"The fulfillment of requirements for both defense and civilian needs already has put a heavy strain on supplies of a number of key materials. Certain alloy metals, such as nickel, cobalt and tungsten, are in very short supply. All nonferrous metals are tightening rapidly. Steel, in spite of capacity production and increased facilities, is be-

coming critical. Only a few types and shapes are generally available. Chemicals are spotty, with key items tending to tighten related groups, though many important categories are still in fair balance.

"The range of adaptability among plastics as substitutes for metals already has resulted in such a tightening of their supply that cellulose acetate is the only important plastic still generally available."

Lumber is one large materials group that as yet has not been seriously affected.

Following is a selection of the more important materials and shapes in each
(Continued on Page 60)

Colwell and Kefauver Are Institute Speakers

NASHVILLE, TENN. — This year's annual institute of higher education being held at Scarritt College on July 24 to 26 will feature three addresses by Dr. Ernest C. Colwell, former president of the University of Chicago, and currently serving as visiting professor of Emory University, Atlanta, Ga., and an address by Senator Estes Kefauver on "Education and Public Morals."

Other featured speakers on the institute program include J. Handly Wright, public relations director of the Monsanto Chemical Company and immediate past president of the Public Relations Society of America; Dr. R. H. Edwin Espy, executive director of the Y.M.C.A.; Dr. Francis J. Brown, staff associate of the American Council on Education, and Dr. John D. Millett, executive director, Commission on Financing Higher Education.

The institute will be divided into five sections for study and discussion of public relations, counseling and guidance, finance, business administration, and religion in education.

Controlled Materials Plan Provides for School Construction

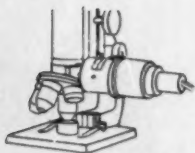
WASHINGTON, D.C.—The National Production Authority's Controlled Materials Plan went into effect on July 7. This plan provides for the allotment of controlled materials (steel, copper and aluminum in the shapes and forms listed in Table 1, N.P.A. Order M-1) to approved construction projects.

The plan further provides for the issuance of rating authorizations for certain other materials and products declared to be essential to the completion of such projects. It replaces the present assistance program for construction.

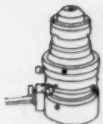
N.P.A. Delegation 14, dated June 6, authorizes the U.S. Office of Education to pass upon construction applications from schools, colleges and libraries. The Controlled Materials Plan extends similar authority to the Office of Education on allotments of steel, copper and aluminum for approved construction projects. The U.S.O.E. will also issue rating authorizations for other materials and products declared essential to completion of such construction.

The Defense Production Administration has allotted to the Office of Education a limited quantity of controlled materials for the third calendar quarter of 1951. The latest date for acceptance of orders for third quarter delivery by the steel companies is July 15. Applications should therefore be submitted on Form CMP-4C immediately if assistance in obtaining materials is required. Since CMP delivery orders are intended to take precedence over DO-rated orders, institutions having DO-rated orders on file with suppliers may wish to file application for CMP rating on Form CMP-4C in order to facilitate delivery.

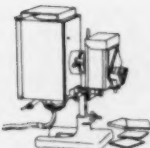
Institutions expecting to start construction on a project during the fourth



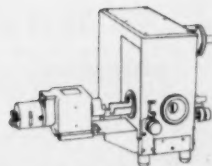
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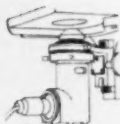
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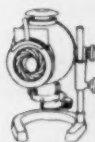
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NEWS

calendar quarter of 1951 must file application on Form CMP-4C with the Office of Education not later than July 20, if the delivery of any controlled materials is expected during that quarter.

The following information will facilitate filing of applications:

Forms to be used. Application for authority to commence construction and/or requests for allotment of controlled materials are to be filed on Form CMP-4C. Replacing NPAF 24,

CMP-4C is a dual-purpose form. It provides for a request for authority to commence construction under N.P.A. Regulation M-4, and for a request for the allocation of controlled materials. Instruction sheets CMP-4C and CMP 4C-2, acknowledgement card CMP 51, and CMP Regulation 6 are to be used in conjunction with CMP-4C.

Who must file form CMP-4C. All schools, colleges or libraries that wish to begin construction on any project in which controlled materials are to

be used, and all that have construction under way and need assistance in obtaining controlled materials, must file this form.

Status of applications previously filed on NPAF Form 24. Those applicants who have previously filed on NPAF-24 for authority to commence construction need not reapply. However, if any allotment of controlled materials is expected, application for such allotment of materials must be made on CMP-4C. It is not necessary to apply for authority to use materials on hand July 7.

Where forms are available. Copies of Forms CMP-4C, instruction sheets CMP-4C and CMP 4C-2, acknowledgement card CMP 51, and CMP Regulation 6 will be available at the following places: (a) Office of Education; (b) regional F.S.A. offices, (c) offices of chief state school officers, and (d) regional, field, and district N.P.A. offices.

Where applications are to be filed. Applications for authority either to commence construction or for allotment of materials should be sent to the U.S. Office of Education, Washington 25, D.C., marked as follows: (a) for elementary and secondary schools (including junior colleges if part of city school system), *Attention:* School Housing Section, Division of State and Local School Systems; (b) for colleges and universities (including their libraries), *Attention:* Division of Higher Education.

Who must sign Form CMP-4C. Four copies of application must be signed by the legally constituted authority of the school or college or by its designated agent. If the signature is by an agent, evidence of delegation of authority must accompany the application.

Workshop in Fund Raising Scheduled at Penn State

STATE COLLEGE, PA. — This year's summer session at Pennsylvania State College will feature, for the first time, a workshop in fund raising planned especially for alumni and public relations executives and for college administrators responsible for selecting fund directors or employing fund raising organizations.

The workshop will be conducted from August 13 to August 31 and will be under the direction of Bernard P. Taylor, vice president of Westminster



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At Right: Close-up of a HERRICK Reach-In Refrigerator at the Chicago Athletic Association.



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NEWS

College, Fulton, Mo. The course will cover the various technics and psychological factors involved in fund raising. Five major areas of fund raising will be reviewed: annual giving programs, capital gifts campaigns, bequests, insurance and annuities, and the long-term development program.

Mr. Taylor, who has conducted fund raising campaigns for many colleges, will be assisted by J. K. Lasser, author of "Your Income Tax" and "How Tax Laws Make Giving to Charity Easy," who will be the consultant on tax problems related to fund raising. Russell Zeininger of the American City Bureau of Chicago, an expert on presentations and fund publicity, and Paul Rydell of R. R. Donnelley and Sons of Chicago will also assist as consultants.

Pennsylvania Defies Television Rule

PHILADELPHIA. — Despite a one-year moratorium on televising football games that had been voted by the National Collegiate Athletic Association, the University of Pennsylvania stated that it would televise its home games at Franklin Field. As a result of its stand, the N.C.A.A. ruled that the University of Pennsylvania was not a member in good standing, a ruling that may seriously affect its intercollegiate athletic program.

The N.C.A.A. experimental plan would permit only one televised game a week in each metropolitan area from September 22 to November 24. Television would be barred at all member games on one week end to determine what would happen to gate receipts under these conditions.

University of Pennsylvania officials are reported to have stated that "it would be a violation of the Sherman Anti-Trust Act if we were to join in a nationwide ban or control of television."

Urges Use of Small Schools in Military Research Projects

EAST LANSING, MICH.—Results of an extensive survey recently conducted by the Engineering College Research Council of the American Society for Engineering Education reveals that there is a high concentration of defense research projects in a few educational institutions, according to the

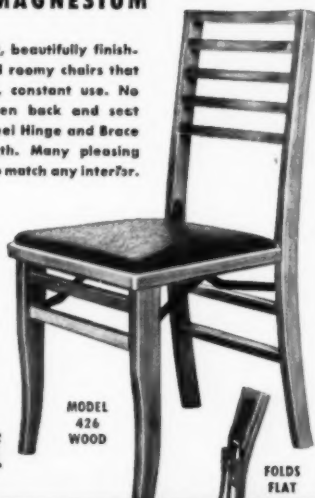
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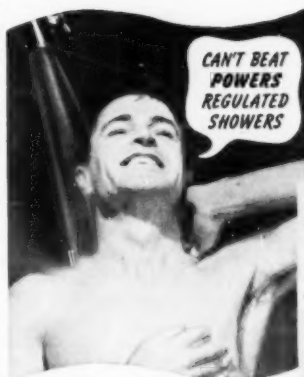


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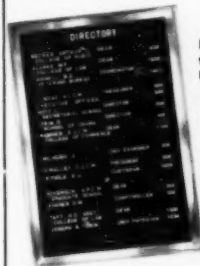
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report presented at the annual meeting of the council by Dean A. F. Spilhaus of the University of Minnesota.

According to Dean Spilhaus, of the 700 educational institutions covered, 15 colleges and universities account for one-half of the total faculty time spent throughout the United States on military research, while these institutions account for only one-fifth of the nation's faculty and senior research staff members. The survey reveals that one-third of the faculty

members qualified to perform research, mostly in small schools, are not now doing so. If these teachers can be given part-time military research assignments on their own campuses, defense research in colleges and universities can be increased by more than 60 per cent, Dean Spilhaus reported.

Earlier in the conference another speaker reported that colleges and universities were responsible for 10 per cent of the nation's pre-Korea military research budget of \$511,000,-

000 and that next year colleges and universities will be expected to do the same proportion of the \$1,325,000,000 defense research total. Dean Spilhaus' survey figures show defense demands greatest in aeronautical engineering, electronics and electrical engineering. In these fields, more than three-fourths of the research in colleges and universities is devoted to military needs.

College Housing Conference Will Attract 100 Delegates

EAST LANSING, MICH. — The third annual national housing conference for college administrators will be held at Michigan State College on August 2 to 4, with more than 100 delegates expected. Kenneth D. Lawson, director of residence halls at Michigan State College, will be general chairman.

Included in the three-day program will be talks and discussions on personnel problems, work simplification, housekeeping, financing, furniture selection, and related subjects.

Speakers appearing on the conference program include Ralph L. Lee, public relations director of the General Motors Corporation; Joe Spickler, management consultant; Harold Cook, Dow Chemical Company; Earl Kress, president of the Ann Arbor Trust Company of Ann Arbor, Mich.; Alta M. LaBelle and Jane P. Barton, co-authors of the new book, "Administrative Housekeeping," and Frank Wood of the board of education of Grand Rapids, Mich.

Minnesota Has Plan for Released Instructors

MINNEAPOLIS. — Officials of the University of Minnesota's Greater University Fund announce the setting aside of a \$4500 emergency fund for partial support of graduate teaching assistants who are losing their positions because of necessary university retrenchment. The money will make it possible for at least 12 teaching assistants to continue their studies.

The Greater University Fund, sponsored by the University of Minnesota Alumni Association, is supported by contributions from alumni and friends of the university. Money raised in the fund's annual campaign is used for scholarships, fellowships, research work and equipment.



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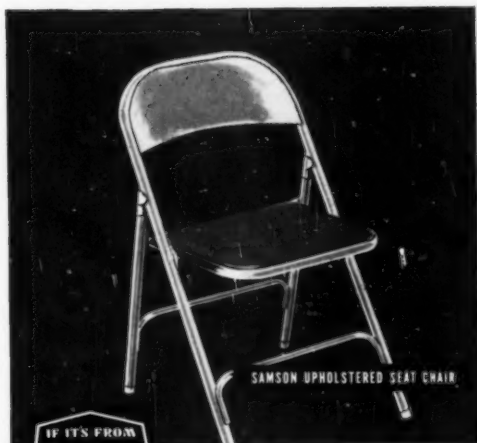
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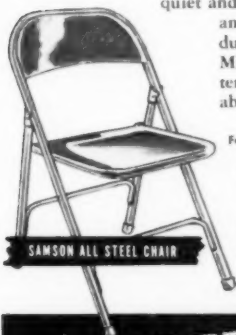
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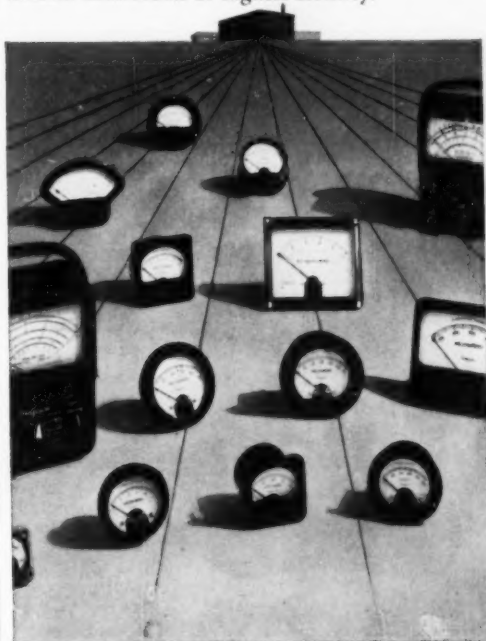
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NEWS.

(Continued From Page 52)
of the foregoing classifications, listed as to their degree of availability:

METALS

In very short supply (33 metals): aluminum, lead, copper, tin, zinc, nickel, tungsten, tin plate, heavy forgings, high alloy castings, die blocks, wire, sheet, nickel-bearing stainless steel, structural shapes, seamless and welded tubing.

In tight supply (24 metals): vanadium, chromium, manganese, carbon steel hot-rolled bars, black sheet, plate, other stainless steel.

In fair supply (6 metals): titanium (ferro), carbon steel and gray iron castings, small forgings and tool steel.

CHEMICALS

In very short supply (77): acetylene, blood plasma, glycerin, sulfur and sulfuric acid.

In tight supply (129): ammonia, borax, caustic potash, chlorine, hydrochloric acid, phosphorus.

In fair supply (14): glycols, insulin, paints, soaps, most vitamins.

LUMBER

In very short supply (5): exterior types of plywood and softwood.

In tight supply (8): top grades of hardwoods and softwoods.

In fair supply (14): all species of lower grade types of hardwoods and softwoods, plus treated softwood products such as piling, poles, posts and railroad ties.

PLASTICS

Eight plastics are listed as being in very short supply, 11 in tight supply and two in fair supply. Plastics materials are rapidly becoming critical.

TEXTILE, LEATHER AND BRISTLE

In very short supply (11): cotton (duck and webbing), domestic hides and skins and some vegetable tanning materials.

In tight supply (30): burlap, high tenacity rayon, new and processed wool, cotton tire cord, yarn and cord fabric.

In fair supply (14): reused wool.

MISCELLANEOUS

In very short supply (17): corundum, graphite, industrial diamonds, mica, most types of new rubber.

In tight supply (14): flourspar, paper and paperboard.

In fair supply (6): wastepaper, reclaimed rubber.

Copies of the "List of Basic Materials and Alternates" are available at district or regional offices of the Department of Commerce. Up to five copies will be provided free of charge. Additional copies may be purchased for 1 cent each from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

New York Leads in Foreign Enrollments

NEW YORK.—The Institute of International Education reported recently that New York State has the largest foreign student enrollment of any state, with a total of 5452 registered in its institutions of higher education. California is second, with 3592 foreign students registered for study in its colleges and universities.



SHOPPING FOR EXHIBIT CASES ?

BUYERS of exhibit cases everywhere are choosing Michaels "Time-Tight" Cases because they are tops in design, quality, structural features, appearance and usefulness.

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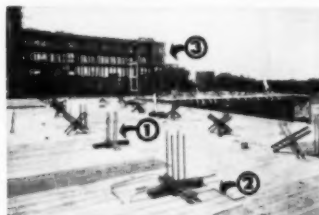
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These cases are designed for maximum visibility; to enhance the appearance of exhibits; to eliminate handling and theft as well as the ingress of dust, vermin and moisture. They are made in a wide variety of styles (table, aisle, wall, corner, suspended and recessed) and in any practical size to take care of virtually all exhibit requirements. If it is necessary to meet specific needs, Michaels will design and build special cases to your specifications. "Time-Tight" Cases are used extensively in museums, art galleries, libraries, universities, colleges, schools, science laboratories and various related types of display rooms.

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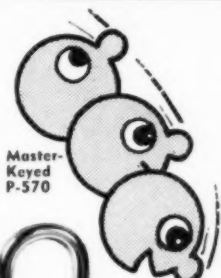
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NEWS.

NAMES IN THE NEWS



R. W. McDonald

Ralph W. McDonald, executive secretary of the department of higher education in the National Education Association, has been named to the presidency of Bowling Green University, Bowling Green, Ohio. He will succeed Dr. Frank J. Prout, who is retiring

after having been president for 12 years. Dr. McDonald's appointment becomes effective September 1.

R. M. Cavness, president of the University of Corpus Christi in Texas, resigned as of mid-April.

George E. Van Dyke, specialist for college business management in the U. S. Office of Education, has resigned to accept the position of assistant controller of George Washington University in Washington, D.C. His new appointment is effective immediately.

Dr. Burgess Lee Gordon, clinical professor of medicine at Jefferson Medical College and director of the hospital's department for diseases of the chest, has been named to the presidency of Philadelphia's Woman's Medical College of Pennsylvania. On September 1 he will become the first full-time, paid president of the college.



Dr. B. L. Gordon

Rev. Russel J. Humbert, pastor of Trinity Methodist Church at Youngstown, Ohio, has been named to succeed Dr. Clyde E. Wildman as president of DePauw University, Greencastle, Ind.

Thomas E. Blackwell, treasurer and secretary of Washington University, St. Louis, has been appointed vice chancellor of the university.

Albert H. Monk, director of the Veterans Administration rehabilitation and educational training facilities service, has been named executive assistant to Sam H. Coile, V.A. assistant administrator for vocational rehabilitation and education. Mr. Coile replaces Harold V. Stirling, who has been head of the V.A. education and training program for veterans. Mr. Stirling has been named V.A. assistant administrator for insurance.

Howard R. Jones, president of Plymouth Teachers College, Plymouth, N.H., has been made professor of school administration at the University of Michigan. He has been president of Plymouth Teachers College since 1946.

Henry T. Maijgren, a member of the staff of the treasurer's office of the University of Rochester since 1937, has been appointed an assistant treasurer of the university by the board of trustees.

Rev. Edmund P. Joyce, C.S.C., who has been studying for the last year at Oxford University in England, has been named vice president in charge of business affairs at the University of Notre Dame. He replaces the Rev. John J. Burke, C.S.C., who is taking an extended leave of absence because of ill health.

Rev. Raphael H. Gross, C.P.P.S., assistant professor of English at St. Joseph's College, Collegeville, Ind., has been appointed president to succeed the Very Rev. Alfred J. Zanolar, C.P.P.S.

Rev. Oscar W. Lever, dean of administration at Columbia College in

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assure better
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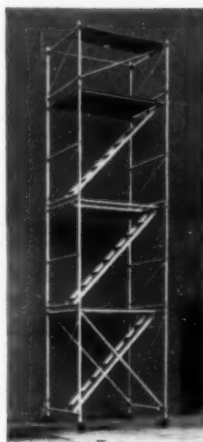
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NEWS.

South Carolina, has been named to succeed **Rev. John F. Baggett** as president of Kentucky Wesleyan College, Winchester, Ky.

Otis W. Freeman, professor of geography at Eastern Washington College of Education, Cheney, Wash., has been appointed to succeed the late **Walter W. Isle** as president. Dr. Isle died on January 10.

Rev. Clyde W. Meredith, president of Taylor University, Upland, Ind., since 1945, resigned on June 4.

Harvey C. Daines, controller of the University of Chicago since 1938, retired from that position on June 30, according to an announcement by **Laird Bell**, chairman of the board of trustees. Mr. Daines underwent a serious eye operation last year and doctors have advised him that the exactions of his



H. C. Daines

work jeopardize the possibilities of full recovery of the use of the eye. No announcement of Mr. Daines' successor has been made.

Paul S. Smith, head of the department of history at Whittier College, has been named president to succeed **William C. Jones**. Dr. Jones retired to accept appointment as superintendent of the Congregational Conference of Southern California and the Southwest.

K. Duane Hurley, formerly editor of the *Sabbath Recorder*, has been named president of Salem College in West Virginia. He will succeed **S. Orestes Bond**, who reached emeritus status on June 1 after 32 years of service.

Charles R. Spain, former dean of instruction at George Peabody College for Teachers, Nashville, Tenn., has been chosen successor to the late **William Jesse Baird** as president of Morehead State College, Morehead, Ky. He will assume his new duties on August 20.

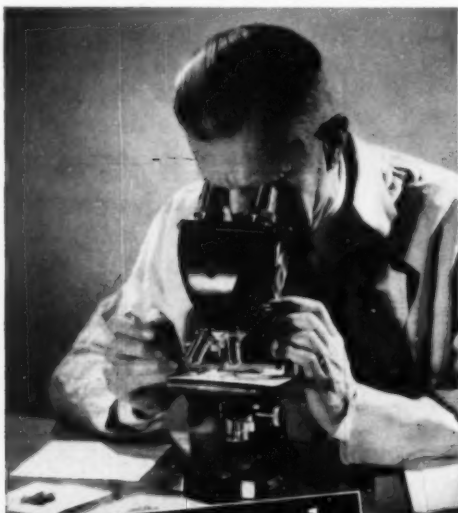
E. DeAlton Partridge, professor of education at New Jersey State Teachers College, Montclair, will succeed **Harry A. Sprague** as president. His appointment becomes effective September 1, upon Dr. Sprague's retirement after 26 years of service.

Alfred T. Hill, vice president in charge of development at Lake Erie College, Painesville, Ohio, on July 1 became director of the Dana Hall Schools at Wellesley, Mass.

Norman P. Auburn, vice president and dean of the University of Cincinnati since 1943, has been named president of the University of Akron. His new appointment becomes effective September 1 when he succeeds **Dr. Hezzleton E. Simmons**, who is retiring at the mandatory age of 65 after 18 years in the office and 41 with the university.

Harold T. Porter, assistant purchasing agent for the Ethyl Corporation in Baton Rouge, La., has been named public school business administrator of the Orleans parish, which includes the city of New Orleans. Mr. Porter was formerly purchasing agent of Tulane University and prior to that had been purchasing agent of DePauw University, Greencastle, Ind.

Very Rev. Joseph R. N. Maxwell, rector and headmaster of Cranwell preparatory school at Lenox, Mass., since 1945, has been named president of Boston College, succeeding the **Very**



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NEWS.

Rev. William Keleher, Father Maxwell served as president of the College of the Holy Cross from 1939 to 1945.

Rev. Edward H. Todd, president emeritus of the College of Puget Sound, Tacoma, Wash., died recently at 88 years of age. He had served as president of the college from 1913 to 1942.

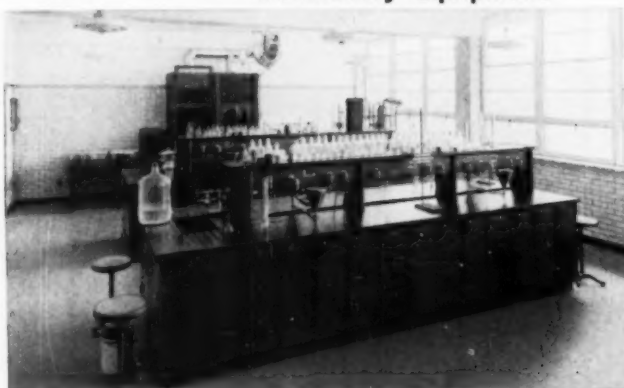
James Pinckney Kinard, president emeritus of Winthrop College, Rock Hill, S.C., died recently at the age of 86. His term as president of the college stretched from 1929 to 1934.



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President: Laurence R. Lunden, University of Minnesota; secretary-treasurer: C. C. De Long, University of Illinois.

Convention: April 20-22, 1952, Ohio State University, Columbus.

Eastern Association

President: D. L. Rhind, Massachusetts Institute of Technology; secretary-treasurer:

Irwin K. French, Middlebury College, Middlebury, Vt.

Convention: Dec. 9-11, Chalfonte-Haddon Hall, Atlantic City, N.J.

Southern Association

President: Gladys Barger, Lenoir-Rhyne College; secretary-treasurer: Gerald D. Henderson, Vanderbilt University.

Western Association

President: Nelson Wahlstrom, University of Washington; secretary-treasurer: James M. Miller, University of California.

American Association

President: Glenwood E. Jones, Shaw University; secretary: L. H. Foster Jr., Tuskegee Institute.

Convention: May 1952, Howard University, Washington, D.C.

Association of College Unions

President: Frank Kuenzel, University of Michigan; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

Convention: April 1952, Oklahoma A. & M. Union, Stillwater, Okla.

Association of Physical Plant

Administrators of Universities and Colleges

President: Walter W. Kraft, University of Oklahoma; secretary-treasurer: A. F. Gallistel, University of Wisconsin.

Convention: May 1952, University of Michigan.

American College Public Relations Association

President: Stewart Harral, University of Oklahoma; secretary-treasurer: James W. Arnsey, Illinois Institute of Technology, Chicago.

College and University Personnel Association

President: Boynton S. Kaiser, University of California; secretary-treasurer: Ruth Harris, University of Illinois.

Convention: July 15-18, Pennsylvania State College.

National Association of College Stores

President: George Racine, Northwestern University; executive secretary: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio.

Convention: 1952, Miami.

National Association of Educational Buyers

President: Jamie R. Anthony, Georgia Institute of Technology; executive secretary: Bert C. Ahrens, 45 Astor Place, New York, N.Y.

Convention: May 1952, Washington, D.C.

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Food Service Director—On west coast, to feed around two hundred fifty to one thousand students; at present time employed on west coast as food director; fifteen years' experience. Write Box CW51, COLLEGE AND UNIVERSITY BUSINESS.

Office Management—Young man; 31; with sales and banking experience desires college or private school business office position; married; two children; veteran; Harvard student prior to military service; available immediately. Write Box CW58, COLLEGE AND UNIVERSITY BUSINESS.

The rates for want advertisements are: 10 cents a word; minimum charge, \$2.50.

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Auditor—College in southwest needs auditor for general supervision of bookkeeping, cashier's office and payroll department; college budget approximates three million dollars annually, position available immediately. Write Box CW51, COLLEGE AND UNIVERSITY BUSINESS.

Food Service Assistant—Women's residence hall director of university in large midwest city requires food service assistant to operate 250 capacity dining hall; will be responsible for menu preparation, foodstuff requisitioning, and personnel; advise experience, age, salary needs, when available. Write Box CW59, COLLEGE AND UNIVERSITY BUSINESS.

Residence Halls Supervisor—University in large mid-western city desires immediately a supervisor for 250 capacity women's residence hall; general supervision of personnel, housekeeping, and food service required; training in institutional management desirable; housing and meals provided in addition to salary; advise experience, age, salary needs, when available. Write Box CW 49, COLLEGE AND UNIVERSITY BUSINESS.

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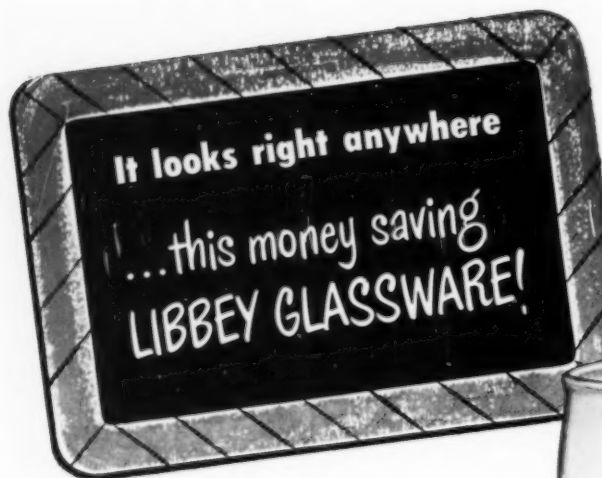
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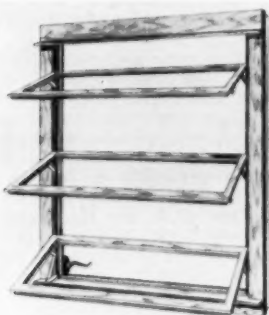
WHAT'S NEW

July 1951

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 72. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort, to supply it.

Wood Auto-Lok Awning Window



The same engineering and research which went into the development of the Auto-Lok Aluminum Awning Window have been used in the new Wood Auto-Lok Awning Window now being made available. The automatic locking principle which ensures a tightly closed window is incorporated in the wood window. The "Floating Seal," a device designed to guard against heat loss, driving rain and dust infiltration, was developed for the window to ensure against the effect of warping, swelling and shrinkage.

Produced from carefully selected, seasoned woods, chemically impregnated, the new Wood Auto-Lok Awning Window utilizes the patented Auto-Lok hardware for precision automatic locking. Combined with vinyl plastic weatherstripping, a positive tight closure and ease of operation are ensured. There is no exposed operating hardware on the window and it can be readily cleaned on both sides from inside the room. A wide variety of sizes makes the new window readily adaptable for all architectural uses. **Ludman Corp., Dept. CUB, P. O. Box 4541, Miami, Fla. (Key No. 702)**

Swivel Yarn Sweeper

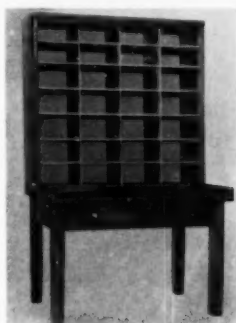
A new duster, especially useful for daily routine dusting of smooth floors, is designed to save time while doing a thorough sweeping job. The Swivel Yarn Sweeper takes up all dirt and dust and the complete mop and handle will pass under an object only 2 inches off the floor and into a narrow space 5 inches wide. The operator can stand in

one spot and, with a twist of the handle, clean around and under desks, chairs, tables, and equipment.

The sweeper has a galvanized steel frame, swivel action and is spot welded for durability. Handles are of lacquered hard maple and the detachable heads are of army duck cotton treated for fast dust pick-up. The heads are easily removed and replaced and are made of washable, non-shrinking canvas. **J. I. Holcomb Mfg. Co., Dept. CUB, 1601 Barth Ave., Indianapolis 7, Ind. (Key No. 703)**

Mail Sorting Table

A wide variety of sizes is available in the line of mail sorting tables offered by Corbin Cabinet Lock—Wood Prod-



ucts Division. Made of selected hardwoods, sanded smooth and lacquered, the tables have pigeon holes for letters or packages. Joints are dove-tailed and glued. The tables are shipped knocked-down, complete with all parts needed for quick, easy re-assembly. **Corbin Cabinet Lock—Wood Products Div., The American Hardware Corp., Dept. CUB, New Britain, Conn. (Key No. 704)**

Plastic Dishes

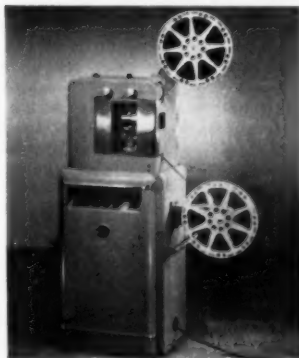
Two new items are now available in the Restaware line of Melmac molded dinnerware. Developed as a result of requests for these items, the new dishes include a five ounce sauce or vegetable dish and a 15 ounce nappy. Restaware has extreme resistance to breakage, is light in weight, quiet in use and easy to handle and wash. All items in the line

are available in pastel blue, coral, yellow or tan as well as in burgundy, chartreuse, forest green and gray. **Keystone Brass Works, Applied Plastics Div., Dept. CUB, Erie, Pa. (Key No. 705)**

Model 25 Projector

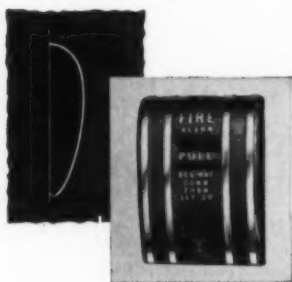
Designed for heavy duty use, the new Kodak Model 25 16 mm. projector is reasonably portable but intended primarily for permanent installation. The new projector is the result of years of research and development work and represents a new approach to the design of 16 mm. projectors. The mechanism is divided into two mechanically independent but interlocked assemblies for durability and quietness. They are driven by separate synchronous motors. Individual motors also drive the blower, take-up and rewind.

The entire projector is designed on a mechanical unit basis for efficiency and ease of maintenance. It has an intermittent sprocket for positive and accurate film transport. It is equipped with a 1000-watt, 10 hour tungsten lamp for unusually high screen illumination. Arc illumination can also be used when required. The projector has a new type of Lumenized Kodak Projection Lens specially designed to give excellent flatness of field and image resolution. Controls are simple and located in a well-lighted panel built into the projector pedestal. In addition to the tone and volume controls, a switch provides for phonograph



or microphone input when desired. **Eastman Kodak Co., Dept. CUB, Rochester 4, N. Y. (Key No. 706)**

Fire Alarm



The new Edwards fire alarm is based on a coded box system which instantly reports to the proper authority where the fire is. It can also notify municipal fire stations of the fire. The location of the fire is immediately shown as the alarm sounds, helping guide the quick and effective evacuation of the building with personal supervision and avoidance of the danger area.

The new box provides not only a safety factor but is attractive and modern in appearance, foolproof and panic-proof. A single pull on the recessed handle, clearly marked, turns in the alarm. The box is fire-engine red with contrasting metal bands. It can, however, be finished in any color to blend with new or remodeled buildings. The box is small and compact and while it takes up a minimum of space, it is readily seen. The system is simple to service and inspect and economically priced. **Edwards Company, Inc., Dept. CUB, Norwalk, Conn. (Key No. 707)**

Aristocrat Globe

The new Aristocrat world globe has a diameter of 25 inches and stands 44 inches high. The colored map is hand mounted on the globe and is large enough to permit thousands of place names to appear in type of a size which can be easily read. The globe rotates on a meridian ring of satin-finish brass which turns easily to expose any part of the world map. The base is constructed of solid walnut in strong, simple lines. As its name implies, the Aristocrat World Globe is designed for libraries, offices and other places where fine appearance will be an asset. **Weber Costello Co., Dept. CUB, Chicago Heights, Ill. (Key No. 708)**

Vertical Unit Heater

An improved vertical discharge unit heater is being introduced. Circular in design, the heater is easy to install and quiet in operation. The simplified design permits peak efficiency of operation with a minimum number of joint connections.

Header design and location of supply and return piping permit a simplified piping hookup and the heater can be installed close to the ceiling.

The rubber-mounted motors and slow speed fans ensure quiet operation. The motor is protected from the air stream and vibration and noise are minimized through a specially designed support cone. Three types of diffusers offer a selection of heating patterns and the choice permits the unit heater to direct heat flow at heights ranging from 9 to 32 feet. The new unit heater will be made in seven sizes. **C. A. Dunham Co., Dept. CUB, 400 W. Madison St., Chicago 6. (Key No. 709)**

Projectors

The line of projectors developed by Viewlex has been redesigned for more brilliance and better fidelity. They are economical in price and are simple to operate, thus making it possible even for pupils to show strip, slide or combination slide and strip films. All units in the line are cool to the touch while op-



erating. They have rustproof, die-cast construction with highest quality lenses.

In the line are the Strip-Film Projector in 150 or 300 watt size, with 2 inch or 5 inch system. Viewlex Slide Projectors are available in the same sizes for 2 by 2 and Bantam slides. The V-2CL and the V-22CL (illustrated) combination slide and strip film projectors handle single or double frame strip film and all types of 2 by 2 slides. All models are designed to safeguard the life of films and slides and are available with carrying case if desired. **Viewlex, Inc., Dept. CUB, 35-01 Queens Blvd., Long Island City 1, N.Y. (Key No. 710)**

Cove Base

Nine new colors have been announced for continuous length Vinyl Plastic Cove Base available from The Fremont Rubber Company. The new colors are permanent, do not chip or peel, and include Ebony, Navy, Light Blue, Cherry, Dubonnet, Sea Green, Forest, Chocolate and Smoky Gray. **The Fremont Rubber Co., Dept. CUB, Fremont, Ohio. (Key No. 711)**

Fiberglass Fabrics

A line of 40 different design and print combinations of Coronized Fiberglass fabrics is being introduced. The hand-print draperies are woven of Fiberglass yarns made by Owens-Corning Fiberglass Corporation.

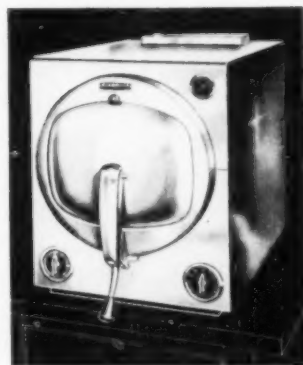
The new fabrics cannot burn but are made of spun glass. They are readily washable and do not shrink or stretch. They resist fading from sunlight, resist wrinkles and require no ironing, thus simplifying maintenance.

The present Fiberglass hand-print drapery materials are the result of long research in processes for printing the fabrics. They have bright fast colors, are soft to the touch and for draping and the many attractive print designs make them suitable for all needs, whether dormitory rooms, sun porches, reception rooms or other areas where draperies are indicated. **Whitcombe-McGeachin & Co., Inc., Dept. CUB, 509 Madison Ave., New York 22. (Key No. 712)**

Steam Pressure Cooker

A new direct connected Steam-It Commercial Pressure Cooker has been added to the regular line of compartment steam cookers offered by the Market Forge Company. Similar in appearance to the gas fired Steam-It, the new unit is directly connected to an existing steam line. Thus it is supplied from steam available at the point of installation, permitting pressure cooking to begin at once.

Designed for small quantity cooking, the unit permits frequent fresh preparation of smaller quantities of food where direct steam is available for cooking. Steam-It may be used for all types of food as a complete cooker or as a pre-cooker. Natural flavors and colors of foods are unchanged, and the unit is



easily cleaned. **The Market Forge Co., Dept. CUB, Everett Station, Boston 49, Mass. (Key No. 713)**

Fluorescent Lighting

The new 4063 luminaire uses two 40 watt, T-12, 48 inch fluorescent lamps and is designed for general illumination. This addition to the Curtis Forty-Sixty line offers 35 degree crosswise and 45 degree lengthwise shielding, thus making it especially suitable for locations where luminaires are to be installed parallel to the line of vision. High levels of illumination without glare can be obtained due to the low-brightness of the 4063 which blends with the illuminated ceiling.

The side reflectors are constructed of Alzak aluminum and the center reflector, louver fins and wiring channel are made of steel finished in white Fluoracite enamel. **Curtis Lighting, Inc., Dept. CUB, 6135 W. 65th St., Chicago 38. (Key No. 714)**

Liquid Disinfectant

A new liquid quaternary ammonium concentrate known as Whiz Puracide is introduced as a powerful and rapid action disinfecting agent which also has highly effective deodorizing properties. It is stainless, odorless, non-corrosive and non-irritating to tissues when used as directed.

Puracide can be used for a wide range of applications and is recommended as a general disinfectant including disinfection of eating and drinking utensils, floors, walls, tables, toilets and basins. It can also be used for disinfecting hands. The product can be diluted to many different strengths, depending on the use for which it is intended. **R. M. Hollingshead Corp., Dept. CUB, 840 Cooper St., Camden 2, N.J. (Key No. 715)**

Cadet Floor Scrubber

The improved Lincoln Cadet floor scrubber has interchangeable attachments for washing and polishing floors and for



scrubbing rugs. It has an increased capacity $\frac{1}{4}$ h.p. continuous duty type motor with large reservoirs for complete

lubrication over long periods of operation, an improved gear reduction unit, and a top grade lubricant with a new seal to prevent leakage of lubricant or entrance of foreign matter into the gear case.

The new floor and rug maintenance unit is designed to meet the need for a small, light weight, single disc unit that will handle heavy duty maintenance for small institutions or one department of the large institution. The wheel carriage has been redesigned and the improved unit is sturdily constructed. **Lincoln-Schlueter Floor Machinery Co., Dept. CUB, 1250 W. Van Buren St., Chicago 7. (Key No. 716)**

Armchairs

Several new chairs have been designed and introduced for use in dormitories, sun rooms, waiting rooms and other areas. The high back chair illustrated (No. 3407), is available with or without arms. Designed by Joe Adkinson, it of-



fers comfort and attractive appearance. The trapezoid shaped seating unit and curved back are of body fitting design and the chair is upholstered for additional comfort.

Armchair No. 3701 has an x-shaped leg and arm design which gives it an interesting modern appearance. The seat and back are upholstered and the chair, designed by Henry Glass, features comfort as well as attractive lines. Armchair No. 3406 with a wide seat and low back is available as a single chair or for sectional groupings with left arm, right arm or without arms. It is available finished in natural maple, walnut or mahogany and covered with coated fabrics, plastics or soft fabrics in a choice of colors. This chair is also designed by Joe Adkinson.

Also in the new line is Armchair 6734, a strong and durable chair of solid wood with saddle shaped seat which is available in dark maple, walnut or mahogany. **Thonet Industries, Inc., Dept. CUB, 1 Park Ave., New York 16. (Key No. 717)**

Toilet Tissue Holder



Considerable saving in toilet tissue is a feature of the new Permo Paper Saver Toilet Tissue Holder. It is also designed to keep the tissue sanitary by preventing it unrolling or falling on the floor. The holder dispenses only two sheets at a time: The paper roll is snapped on, locked, and cannot be removed until the roll is empty.

Elongated screw holes in the Permo Holder make it easy to attach it to the wall. It is made of steel, aluminum or chromium plate, in one piece, with no springs or removable parts. It is a permanent fixture which operates simply, is rust resistant, durable and should require no maintenance or repairs. The patented locking device prevents removal of rolls of toilet paper, thus preventing petty theft as well as waste. Any size roll of paper fits the holder. **National School Supply Co., Inc., Dept. CUB, Raleigh, N.C. (Key No. 718)**

Rubberized Paint

Wallhide Rubberized Satin Finish is a new interior paint with unusual decorative qualities combined with durability and washability. It has the appearance and usefulness of a flat wall paint with rubber-like characteristics. The paint requires no primer and is easily applied by brush, spray or roller coater on any interior wall or ceiling surface, including new or old plaster, paint, wallpaper, wall-board, brick, concrete, cinder block, wood or primed metal. The rubber-like film prevents grease, lipstick, finger smears and ink spots from penetrating the surface so that they are easily removed.

The new product should be of particular interest in institutions since it has no objectionable odor and dries to a smooth finish in approximately one hour. If a second coat is desired, it can be applied after four hours. As a result, rooms need not be kept vacant for long periods of rehabilitation. The paint does not crack or chip as the film remains flexible and it can be washed without damage to sheen or color. It is available in 12 standard colors. **Pittsburgh Plate Glass Co., Dept. CUB, 632 Duquesne Way, Pittsburgh 22, Pa. (Key No. 719)**

Product Literature

• Starting out with a discussion of "what makes automatic air conditioning installations completely successful," a new 72 page booklet issued by Minneapolis-Honeywell Regulator Co., 2747 Fourth Ave., S., Minneapolis 8, Minn., continues with detailed and technical information on "Automatic Controls for Air Conditioning and Heating." Engineering data, including tables and graphs, are included in the booklet. (Key No. 720)

• The various lines of seating manufactured by Griggs Equipment Co., Belton, Texas, are illustrated and described in a new 32 page **Catalog 51-B** recently released. The catalog gives full data on the Skyliner, Airliner and Pioneer series together with the All-Star Auditorium Chairs, Sportsman Stadium Chairs and the line of Griggs window shades including "Fyrban" fire resistant shades. (Key No. 721)

• An effective solution to the dust annoyance problem is offered in a new brochure entitled "**Gulf Sani-Soil-Set**," issued by Gulf Oil Corp., Gulf Bldg., Pittsburgh 30, Pa. Information is given in the brochure on how the Gulf Sani-Soil-Set is used, what it does and how it is applied. (Key No. 722)

• A new catalog on "**Fenestra Steel and Aluminum Building Panels**" has been released by Detroit Steel Products Co., 2250 E. Grand Blvd., Detroit 11, Mich. The 38 page catalog contains valuable data for those interested in economical construction of schools, hospitals and other institutional buildings. Panel selection tables are provided as a guide to choice of the most economical Fenestra panel for a given need. The catalog has been revised to represent current practice and contains numerous photographs of new job installations. (Key No. 723)

• Improvements in the 1951 line of Mills Continuous Custard and Batch Ice Cream Freezers are described in **Brochure No. 751** released by Mills Industries, Inc., 4100 Fullerton Ave., Chicago 39. Features include a simplified gravity feed for the Hopper Model, new type feeder and stainless steel mix pump for the cabinet model, and a new extra heavy drive head. (Key No. 724)

• The 1951 catalog of Angelica uniforms is now available. Known as the "**Blue Book of Uniform Fashions**," the 52 page book illustrates more than 200 men's and women's uniforms and over 225 accessories for all types of personnel. A wide variety of colors is available in Angelica uniforms which are illustrated, in many instances, in full color in the catalog. It is available from Angelica Uniform Co., 1419 Olive St., St. Louis 3, Mo. (Key No. 725)

Methods Manuals

Because much of the literature received by the editor of "What's New" is of a guidance or reference nature, as differentiated from catalog and other actual product literature, a new section of the "What's New" department has been set up. Under "Methods Manuals" will be listed that literature which it is felt will be helpful to the administrator and his department heads in relation to operational, educational or public relations problems.

"**The Care and Handling of Glass Volumetric Apparatus**" is the title of a new booklet containing accurate basic information for scientific and clinical laboratories and for advanced students in chemistry. The booklet discusses the proper handling, care and calibration of volumetric glassware and affords an opportunity for laboratory technicians to add to the life of their equipment by proper handling. The result of months of research and preparation, the manual is offered by Kimble Glass Division of Owens-Illinois Glass Co., P. O. Box 1035, Toledo 1, Ohio. It contains 16 colored figures and six tables describing systems of weights and measures, cleaning apparatus, reading the meniscus, gravimetric and volumetric calibration and the drainage time of burettes and pipettes. (Key No. 726)

The second edition of the **IBM Typing Guide**, containing helpful suggestions for increasing typing speed and accuracy, is now available from International Business Machines Corp., 590 Madison Ave., New York 22. The booklet is a typing manual with complete instructions for operating and maintaining an electric typewriter. It illustrates and discusses typing techniques and other fundamentals and gives basic exercises for speed and accuracy. Included is a page on "Practical Punctuation" for ready reference. (Key No. 727)

A collection of "**Recipes Right for Quantity Cooks—Recipes for Extending Your Food Budget**" is being offered by National Biscuit Company, Mary Ellen Baker, 449 W. 14th St., New York 14. These recipes were compiled as a result of requests for "budget-wise" dishes and the collection is available without charge. (Key No. 728)

• The new **John Van Range Steam Cooking Chart and Time-Table** gives specific information on steam cooking of 81 items, from apples to turnips. The chart includes the number of minutes in the steamer, whether non-pressure or pressure, as well as the recommendation as to the type of pan in which the food is to be placed in the steamer. The chart is designed for those concerned with mass feeding in institutions and is available from The John Van Range Co., 401 Eggleston Ave., Cincinnati 2, Ohio. (Key No. 729)

"**Book Mending**" is the title of a practical manual on the subject issued by the Library Bureau of Remington Rand Inc., 315 Fourth Ave., New York 10, for the use of librarians. Covering all aspects of the job of caring for wornout books, the 10 page manual tells how to judge whether a book can be restored by hand mending, can be salvaged only by re-binding, or is beyond repair. It gives detailed instructions as to the best methods and materials to use in each mending problem and is based in part on suggestions made by the staffs of five leading university and public libraries. Designated as LB 223-E, the manual is available without charge. (Key No. 730)

"**The Story of Research**" has been told by E. I. du Pont de Nemours & Co., Inc., Wilmington 98, Del., in a new booklet designed to show the significance and importance of industrial research. It has been written with the idea of serving as a reference manual on the subject and has been done with a great many illustrations to add to the interest of the text accompanying them. The booklet is attractive in layout and printing, is informative and interesting. (Key No. 731)

• The American Ladder Institute, 666 Lake Shore Drive, Chicago 11, has published a folder on "**The Right Ladder for Every Job**." It is designed to familiarize the users of ladders with the right ladder for the job and to educate them in the proper use, care and handling of ladders. (Key No. 732)

Suppliers' News

Dudley Lock Corporation, manufacturer of combination locks and locks with key control, announces removal of its offices and plant from 570 W. Monroe St., Chicago 6, to Crystal Lake, Ill.

D. W. Onan & Sons, Inc., manufacturer of emergency lighting equipment, announces the removal of its offices from 39 Royalston Ave., Minneapolis 5, to 6251 University Ave., Minneapolis 14, Minn.

C. M. Sorenson Co., Inc., manufacturer of laboratory equipment, announces removal of its offices from 403 E. 62nd St., New York 21, to 50-19 47th Ave., Woodside, Long Island, N.Y.

Purchase of the business of **Victor Animatograph Corporation, Davenport, Iowa**, manufacturer of 16 mm. motion picture equipment, has been announced by **Samuel G. Rose**, former president. The business, founded in 1910, has been operated as a division of the Curtis-Wright Corporation for the past five years. Mr. Rose, as president and treasurer, has formed a new Iowa corporation under the Victor Animatograph name. Headquarters will remain in Davenport.

PRODUCT INFORMATION

Index to "What's New"

Pages 69-72

Key

702 Ludman Corporation
Wood Auto-Lok Awning Window

703 J. I. Holcomb Mfg. Co.
Swivel Yarn Sweeper

704 Corbin Cabinet Lock
Mail Sorting Table

705 Keystone Brass Works
Plastic Dishes

706 Eastman Kodak Co.
Model 25 Projector

707 Edwards Company, Inc.
Fire Alarm

708 Weber Costello
Aristocrat Globe

709 C. A. Dunham Co.
Vertical Unit Heater

710 Viewlex, Inc.
Projectors

711 Fremont Rubber Co.
Cone Seal

712 Whitcombe-McGeehin & Co., Inc.
Fiberglass Fabrics

Key

713 The Market Forge Co.
Steam Pressure Cooker

714 Curtis Lighting, Inc.
Fluorescent Lighting

715 R. M. Hollingshead Corp.
Liquid Disinfectant

716 Lincoln-Schlueter Floor Machinery Co.
Cadet Floor Scrubber

717 Thonet Industries Inc.
Armchairs

718 National School Supply Co., Inc.
Toilet Tissue Holder

719 Pittsburgh Plate Glass Co.
Rubberized Paint

720 Minneapolis-Honeywell Regulator Co.
Air Conditioning Booklet

721 Griggs Equipment Co.
Catalog 51-B

722 Gulf Oil Corporation
"Gulf Sani-Soil-Set"

Key

723 Detroit Steel Products Co.
Building Panel Catalog

724 Mills Industries, Inc.
Brochure No. 751

725 Angelica Uniform Co.
"Blue Book of Uniforms"

726 Kimble Glass Division
Glass Apparatus Manual

727 International Business Machines Corp.
IBM Typing Guide


728 National Biscuit Company
Recipes

729 The John Van Rensselaer Co.
Steam Cooking Chart

730 Remington Rand Inc.
"Book Mending" Manual

731 E. I. du Pont de Nemours & Co., Inc.
"The Story of Research"

732 The American Ladder Institute
"The Right Ladder"

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Index to Products Advertised

Key	Page	Key	Page	Key	Page
733 Adams & Westlake Company Aluminum Windows 11		745 Eastman Kodak Company Photocopy Paper 55		757 Ludman Corporation Awning Windows 4th Cover	
734 American Chair Company Easy Chair 61		746 Frigidaire Division Refrigeration Equipment 9		758 Michaels Art Bronze Company, Inc. Exhibit Cases 60	
735 Bausch & Lomb Optical Company Scientific Instruments 53		747 Goodrich Company, B. F. Flooring Products 54		759 Minneapolis-Honeywell Regulator Co. Temperature Controls 2nd Cover	
736 Calotex Corporation Acoustical Material 2		748 Guth Company, Edwin F. School Lighting 7		760 Moore, Inc., P. O. Key Control 56	
737 Clarin Mfg. Company Folding Chair 65		749 Herrick Refrigerator Company Refrigerators 85		761 National Biscuit Company Institutional Food 51	
738 Colorado Fuel & Iron Corp., The, Wickwire Spencer Steel Division Steel Fence 57		750 Holcomb Mfg. Company, J. I. Cleaning Materials 64		762 Patent Scaffolding Company, Inc. Aluminum Scaffolds 63	
739 Continental Steel Corporation Steel Fence 65		751 Huntington Laboratories, Inc. Liquid Soap 62		763 Peabody Seating Company School Seating 61	
740 Corbin Cabinet Lock Mail Handling Equipment 67		752 Kellogg Company Institutional Food 8		764 Pick Company, Inc., Albert Folding Chairs 89	
741 Crane Company Plumbing Equipment 10		753 Keweenaw Mfg. Company Laboratory Equipment 66		765 Powers Regulator Company Temperature Controls 57	
742 Crotty Brothers, Inc. Food Service Management 65		754 Laboratory Furniture Company, Inc. Laboratory Furniture 5		766 Rastetter & Sons Company, Louis Folding Chairs 57	
743 Deavenport & Son, Inc., A. C. Bulletin Boards 57		755 Legge Company, Inc., Walter G. Floor Maintenance 12		767 Remington Rand, Inc. Photocopy Machine 58	
744 Dudley Lock Corporation Locks 61		756 Libbey Glass Company Tumblers 68		768 Sites Company, Inc. Institutional Furniture 3rd Cover	
				769 Simpson Electric Company Electrical Instruments 59	
				770 Sloan Valve Company Flush Valves 1	

July, 1951

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

WHAT'S NEW

702	703	704	705	706
707	708	709	710	711
712	713	714	715	716
717	718	719	720	721
722	723	724	725	726
727	728	729	730	731
732				

ADVERTISEMENTS

733	734	735	736	737	738	739	740	741
742	743	744	745	746	747	748	749	750
751	752	753	754	755	756	757	758	759
760	761	762	763	764	765	766	767	768
769	770	771	772	773	774	775	776	

NAME	TITLE		
INSTITUTION			
ADDRESS	CITY	STATE	STATE

771 Smooth Ceilings System Ceiling Building Method 61	
772 Staples Company, H. F. Floor Maintenance 56	
773 Thonet Industries, Inc. School Seating 63	
774 Toledo Scale Company Kitchen Machines 15	
775 Vestal, Inc. Floor Maintenance 16	
776 Wakefield Brass Company, F. W. School Lighting 13	
778 Wickwire Spencer Steel Division of The Colorado Fuel & Iron Corp. Steel Fence 57	

PICTURES that SPEAK LOUDER THAN WORDS



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